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B. & O. "Sentinel Service" Pays Off 50

The road has convinced skeptics of its ability to provide this
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An EXAMPLE of what C.T.C. can do



In single-track territory, "Union" Centralized Traffic Control serves to expedite traffic by: (1) advancing trains as long as track is available; and (2) speeding train movements through reducing delays at meeting and passing points. Here, both are illustrated—and such operations produce outstanding results:

- Practically doubles single-track main line capacity—in some instances, has approximated 90% capacity of a double-track line with directional operation.
- Reduces operating costs by cutting road time for given runs and eliminating overtime, by avoiding train stops, and through maximum utilization of motive power. Slashes per diem costs, too, by getting cars to connections or consignees faster.

If train delays are boosting your single-track operating expenses, let our engineers show how "Union" C.T.C. can step up track capacity and efficiency—and cut down those costs.



Southbound local freight, advances ahead of fast freight which is to meet northbound fast freight at this station, pulls into clear for station work.



Minutes later, the two fast freights appear; the local has already started its work.



The meet between the fast freights has been made with practically no delay and the local has gained at least 30 minutes.

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The Week at a Glance

SHIPPER SURVEY: Our report of the recent annual meeting in St. Louis of the Shippers Advisory Boards (page 39) includes a tabulation of the regional boards' appraisals of several of the questions foremost in the minds of those who have to use or to provide transportation service. Those questions include the effect of strikes, of the five-day week in industry, of the penalty demurrage rule, and of carrier failures, on the efficiency with which freight cars are used. As would be expected, the shippers generally don't like the penalty demurrage rule, and they generally do not subscribe to the argument that the long week-end has any serious effect on car utilization. On the importance and prevalence of carrier failures the boards report themselves about evenly divided: Some say there are many complaints indicating poor service and others that their difficulties are negligible. Of course the foremost question in the minds of all attending the meeting was the one fired from the floor at A. A. R. President Faricy, "What are we going to do about the car shortage?"

BETTER BUDD BRAKE: The limiting factor in the design and use of the disk brake in railway car trucks is not the development of the torque necessary to produce an exceptionally high rate of deceleration, but the dissipation of the heat energy so created. An illustrated article in this issue (page 41) reports the success the Budd Company has realized in meeting this limitation with the improved design of the disk brake of its manufacture which has been undergoing the test of regular service. It is possible with it to bring to a stop in less than 2,500 ft. a car going 100 m.p.h.

BETTER THAN '46: Net income of Class I roads in September was around \$21 million, the A. A. R. Bureau of Railway Economics estimates, and that brings the total net for the first three quarters of this year to around \$316 million—not a bad result when put against 1946's comparable \$105 million, perhaps, but still a long way below what the industry needs to restore its credit standing to a level where private investors will want to risk their money in its equities. A favorable factor, however, is this: September results reflect the effect of the latest non-op wage increase, but they do not reflect the offsetting effect of the interim freight rate increase allowed by the commission in Ex Parte 166. Details of the latest income summary appear in the news columns.

AUGUST BUYING DATA: Tables in this issue bring up to the end of August the picture of expenditures made this year by the railroads for materials and fuel and obligations undertaken for new equipment. These totals must be heartening to the suppliers of these products, because they show that the railroads are continuing to be substantial consumers—substantial contributors to the support of high-level operation of industry, that is—despite the doubts that they might very well have had in August about their earnings prospects. Since then, of course, the prompt action of

the Interstate Commerce Commission in allowing an emergency freight rate increase to be made has materially brightened those prospects.

THEY LIKE IT: Praise from shippers, and the more tangible evidence of increased business, leaves the B. & O.'s freight people pretty well satisfied that they "have something" in the "Sentinel Service" for carload freight movement they instituted last spring. An article herein samples the sentiments of people who have been impressed by the advantages of this plan for precisely informing consignors and consignees about the service they can expect, and for keeping them posted when things go haywire and upset the routine on which those expectations are based. As a result of this favorable reception, the basic idea is being broadened to meet the needs of more customers.

FACTS THE BEST WEAPON: Professed socialists who make no bones about wearing the party label are scarcely more than a handful in this country, but people who *act* like socialists while they *speak* the gospel of private enterprise are quite numerous, even in the ranks of businessmen. The effect of their socialistic inclinations—or their passive acceptance of the socialistic doctrines foisted on them—on the recent development of the American economy is particularly evident in transportation, where state aid and state control are steadily gaining ground. When the issue is put squarely before them this country's voters almost invariably reject socialism; the difficulty is to expose the under-cover encroachments of socialism that are endangering the life of private enterprise, in transportation now and in all industry eventually. It would be difficult to find a more effective way to expose the contradictions and pretensions of socialism, our leading editorial points out, than simple, straightforward, but dramatic, expositions of the facts. The railroads used this method with spectacular success in the devastating "15 sitters" advertisements exposing some of the absurdities of featherbedding. The method can be used again, and repeatedly, with equal profit, in exposing the shams and hypocrisies of socialism. It is being used, and with encouraging results, in England.

S.P. KINKS STRAIGHTENED: Like most railroads built in more or less rough country, the Southern Pacific's main line across west Texas had quite a few segments where sharp curves, especially curves in combination with significant grades, required the imposition of speed restrictions adversely affecting the running time of trains. Lines built under pioneering conditions could hardly be otherwise. Where the expense of eliminating or at least of alleviating these bottlenecks is not absolutely prohibitive the advantages are too obvious to be ignored by any road that can scrape up cash enough to cover the engineers' budgets. What the S. P. has achieved in the way of saving passenger- and freight-train time by its Texas line revisions is told in an illustrated article in this issue.

SURVEY BY SILLCOX: New York Air Brake's first vice-president sets forth in one of our articles the results of a careful and comprehensive examination of practical considerations that ought to enter into the planning and production of the 300,000 freight cars, and the proportionally equivalent number of new passenger cars, the railroads must have to get the best of the obsolescence that is currently draining away the earning power of their equipment inventories. More research, more attention by designers to easy maintenance, more efficient maintenance facilities, closer weighing of first costs against upkeep and depreciation charges—these are a few of the recommendations he offers (page 44).

BOOKS-ON-TRAINS PLAN: A short illustrated article in this issue describes a plan, set to go into operation on several railroads in December, which will make popular current books available on trains to passengers who may find their time passing slowly. These books will be on sale, generally through dining car stewards, at regular retail prices.

PERPETUAL CONTROL?: The President's "emergency" authority to tell the railroads how, when, where and by whom their facilities can be used ought to be extended, says Secretary of Commerce Harriman. These "wartime" powers will expire next February 29 as things now stand. They have been exercised by the O. D. T. or by the commission at O. D. T.'s "request." There is greater need for such controls now than there was last summer, says the secretary's quarterly report, because the car supply situation, now "acute," may be worse.

VULNERABLE ARTERIES: The experience of the Italian railways in the recent war is one that other countries will not want to ignore in blueprinting their future. Many main lines in Italy have been electrified, because that country's coal resources are very limited, but both the German and the Allied armies found those electrified lines particularly easy to put out of commission when it was to their advantage to do so. As a result, the Italian railroads were in a sad state when hostilities ceased, and some of the most essential links in the network are not yet fully restored. What has been done to approach normal service, and what plans are on foot for future development, one of our illustrated articles suggests.

BRIEFLY NOTED: New "Rockets" on the Rock Island and new "Zephyrs" on the Burlington are to go in service this month between Chicago and Nebraska. . . . The railroads want to make the red cap service charge 15 cents per bag. . . . The short lines' claim that per diem rates are too high, and six western roads' claim that they are too low, are being heard by the I. C. C. . . . The A. S. M. E.'s program for its December 1-to-5 annual meeting is outlined in the news pages. . . . Washington "planners" are advocating rationing of steel.

they took
the "SLACK"
out of the
Hoosac

THE Boston & Maine Railroad a year ago discontinued use of electrification in the famous Hoosac Tunnel in Massachusetts. General Motors Diesel locomotives made it possible.

Completed in 1876 at a cost of approximately \$20,000,000, the 4.73-mile Hoosac was the first prominent tunnel in America and for many years the longest. It was electrified in 1911 with an expenditure of \$541,000.

In the days of steam, trains approaching the tunnel would change engines and be hauled through by electric locomotive. This necessitated a switch of locomotives at each end of the tunnel—a costly, inefficient operation.

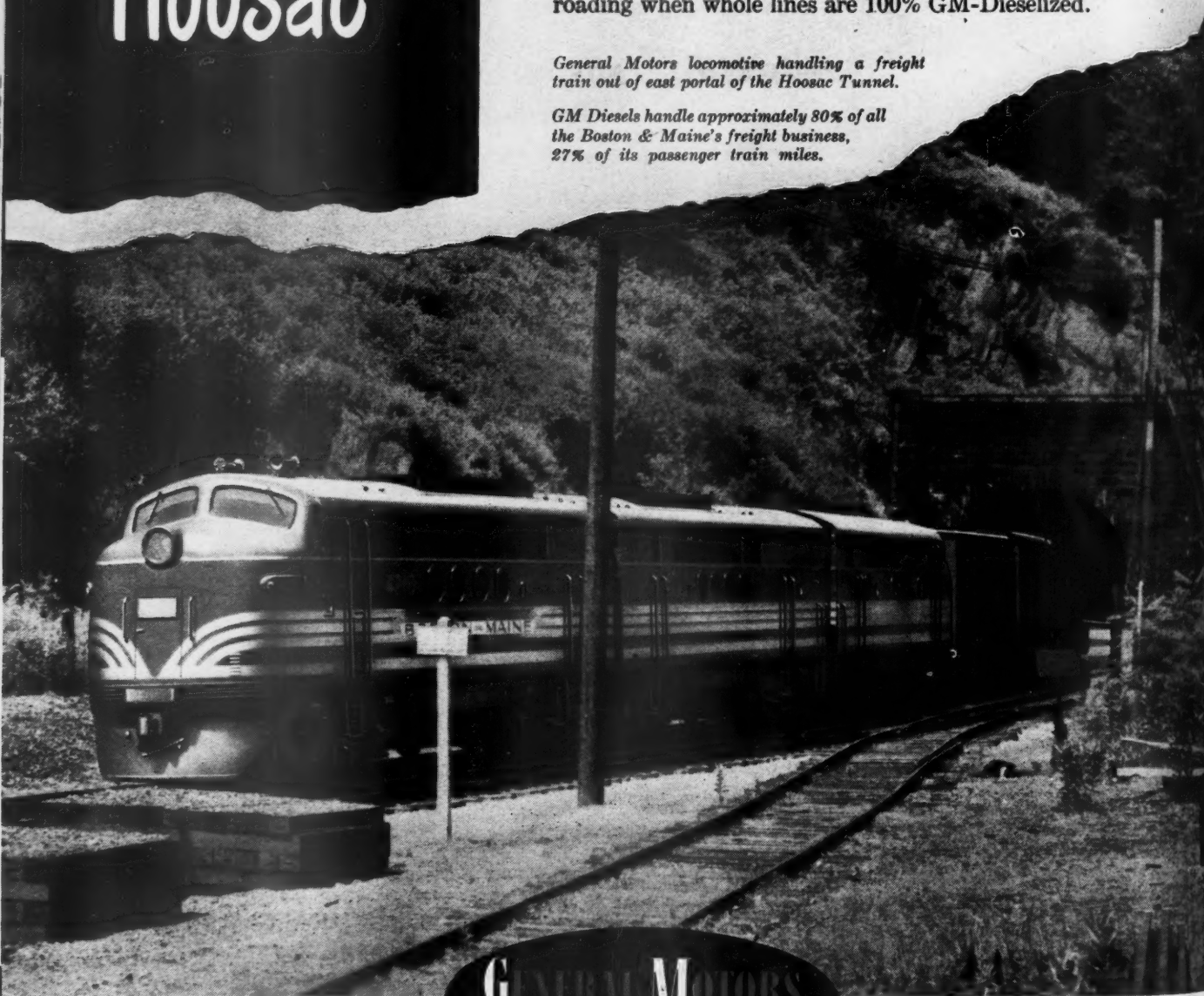
With the advent of the B&M's dieselization program, electrification was no longer needed and the expensive installations were torn out.

Now, high-speed freight and passenger trains powered by General Motors Diesels go straight through without delay. The "slack" is gone—the savings in both time and money are obvious.

Thus the Boston & Maine takes another progressive step toward the higher level of operating efficiency that will come to railroading when whole lines are 100% GM-Dieselized.

General Motors locomotive handling a freight train out of east portal of the Hoosac Tunnel.

GM Diesels handle approximately 80% of all the Boston & Maine's freight business, 27% of its passenger train miles.



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ELECTRO-MOTIVE DIVISION

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RAILWAY AGE

How to Thwart Socialism, Including Socialism in Transportation

The trouncing suffered by the Laborites in the British municipal elections last week, and the movement to the "right" in other countries of Western Europe—combined with the trend away from New Dealism in this country—justify the conclusion that there is nothing inevitable, as the Marxists insist, about what looked not long ago to be a worldwide movement toward socialism. It is evident that there is a way to remove such people and their policies from power—unless, indeed, they entrench themselves by "iron curtain" tactics; and even such measures as those have no guarantee of indefinite success.

Careful study of the methods which have already resulted in exposing the folly of socialist policies, and in retiring adherents of such policies from positions of authority, ought to prove helpful in other situations where statism and socialism are still firmly entrenched, as, for example, in the transportation business in this country. New Dealers and Laborites may come and go but the socialization of transportation in the world's greatest capitalist country still moves relentlessly forward. The explanation can lie only in the fact that the methods which have been used to expose and defeat socialism elsewhere have not yet been adequately applied to arouse general attention to the situation in America's transportation industry.

What are these methods? They cannot be completely described in small space but, in general, most of the successful attacks could be classified as *factual exposure of the contradictions and hypocrisies of the socialists' position*. Name-calling and singing the blues have also been tried. These weapons have shown themselves to be ineffective, but persistent revelations of facts which amusingly belie the fancy socialist pretensions always hit the target.

A book recently arrived from across the Atlantic*

admirably exemplifies this technique. The author is a member of Parliament, so he has a close-range knowledge of what and whom he is attacking. He calls them *ex-socialists*, because he shows in detail that it is not the "classless society" for which they are striving, as they profess, but merely to oust the present industrial leaders, substituting themselves in these positions of power. "There is nothing new in a governing class attaining power by affecting to speak in the name of the people," the author says, and he proceeds to show from history that whenever a group or class seeks to establish itself in a dominant position it seldom neglects to proclaim itself the "champion of the people."

Socialism Removes Incentive to Work

The British socialists have always opposed—in words—special privileges for the rich and the nobly born, but, as the author of this book points out, quoting the very words of a socialist politician, the Laborites, being now in power, strongly favor "privileges necessarily associated with the carrying out of service to the community." Thus, it is sinful for an industrialist to possess a limousine with a liveried chauffeur, but quite in accord with socialist policy that the bureaucrat who takes over the industrialist's job should enjoy that luxury. The author shows that the only difference between the positions of the privileged industrialist and the privileged bureaucrat is that the former can be taxed into poverty and thus eliminated while the latter, if the socialists should become firmly entrenched, would be irremovable.

This author—as well as the other critical observers of Britain's Labor government, who must now be credited for putting it in its present weakened position in public esteem—offers overwhelming evidence to show that the socialist system minimizes national and personal income by removing all incentive both from business men and wage earners, to induce them to the added exertion

* "The Rise and Fall of the Ex-Socialist Government," by Christopher Hollis. Published by Hollis & Carter, 28 Ashley Pl., London, S.W.1. Price 8s. 6d.

needed for increased production. "Our island is almost made of coal and surrounded by fish. Only an organizing genius could produce a shortage of coal and fish at the same time. Unfortunately we have such geniuses in power." Hollow pretense cannot stand up against such exposure—which does not consist in name-calling but only in listing facts which everyone recognizes, contrasting them with the pretensions.

Does anyone doubt that this country's transportation socialists—our federal-aiders, our St. Lawrence advocates, our airport panhandlers, would appear any less ridiculous than Premier Attlee and his associates do, if they were subjected to comparable treatment? Quite the contrary—our transportation socialists are the *more* vulnerable to such attention because they do not even admit their socialism. Their pretensions are, therefore, proportionately more absurd and ludicrous. Practically all of America's transportation socialists are outspoken exponents of "free enterprise," in the abstract, and most of them are quick to denounce the government for doing the things *to* them that they demand be done *for* them.

The railroads have some actual and successful experience with this technique. Take the highly praised "15 sitters" advertisement, mentioned in this space two weeks ago. It was undoubtedly one of the most effective instruments yet produced for *communicating* to public and employee understanding the intrinsic folly of "featherbedding." No names were called. Nobody was asked to feel sorry for anybody else. The essential facts were simply but dramatically presented in their inherent absurdity, and were allowed to speak for themselves. This was an application to the "featherbedding" problem of the identical method which opponents of British socialism have been using, with results which now offer promise of eventual complete victory.

A Problem of Communication

One of the ablest of the railways' public relations officers—in a friendly comment on the opinion expressed here to the effect that management has not thoroughly learned how to explain and interpret its problems to subordinates and the public in terms of their own interests—writes: "We know *how* to do these things, at least reasonably well. What we need from management is the 'green light'."

This contention is correct. But management, quite properly, is not going to give the "green light" to proposals about such vital matters unless it has informed itself sufficiently to feel competent to distinguish effective communication technique from the ineffective. Until it attains that assurance, it is not unlikely to pursue a highly cautious course, which, if mistaken, cannot do much harm; and, if correct, can accomplish little good. It is the purpose of such discussions as this to draw attention to instances of successful operations in the communication to others of management's problems, in order to make available to those who must decide such questions a background of information which will enable them to do their deciding with greater ease and confidence. Suggestions will be welcome, either from public relations officers or management, as to how the essence of this situation may be more effectively presented. There is involved here a problem of communication *to* management—not just of communication *from* management to others.

Is the Steel Industry Looking for a New Home?

Great and far-reaching changes in the character and location of the steel industry, with equally important consequences for the rest of the American economy, were predicted by a writer, Marvin Barloom, in the August issue of Harper's Magazine. His thesis was that the high-grade iron ore of the Mesabi range will give out some time around 1964. Thereafter all the iron that will be left in the Mesabi will be in taconite, a magnetic rock which contains a low percentage of iron, costly to convert into a concentrate because of high labor costs and the local shortage of coking coal in Minnesota. Consequently, the writer asserted, the steel industry is looking toward foreign deposits of iron ore to supply the bulk of the ore after the Mesabi and Lake Superior region high-grade deposits are exhausted. He predicted, furthermore, than in order to process foreign ore at the most economically advantageous locations, the steel industry probably will move toward the Chesapeake and Mobile Bay regions.

If these predictions are essentially correct then the traffic picture of the railroad industry is due for a great change, for industries dependent upon steel would tend to gravitate to a changed source of supply. Most of the industries dependent upon steel are now located in or near the Great Lakes region where most of the steel is produced. The direction of coal movement would change and roads now carrying a heavy tonnage of ore would have to look for other sources of traffic.

Just how dependable are such prognostications? Responsible people in the steel industry are not in agreement on the answers. C. M. White, president of the Republic Steel Corporation, in a speech before the American Institute of Mining and Metallurgical Engineers on last March 17, said that the use of lower grade potential ores "may involve even some relocation of the iron and steel industry." Others believe that some measure of relocation of the steel industry is coming, whether our own taconites and magnetites or foreign ores supply the raw materials. Still others insist that the steel industry never will operate its furnaces on foreign ores, probably meaning not mainly on such ores. Steel in its issue of October 13 mentioned an iron mine of Republic Steel in the Adirondacks of New York and stated that at present that mine was producing 1½ million tons of ore and concentrate annually. In the same story Steel also stated that some movement of the steel industry to the eastern and Gulf coasts might be in the offing but that the movement was not likely to be as sudden or as pronounced as some predictions would have us believe.

It is certain that the big steel companies are interested in foreign ore deposits. It is worthy of note, too, that Senator Flanders of Vermont has proposed that Britain be asked to supply the U. S. with iron ore from Labrador as a form of reverse lend-lease. The senator doubtless indulges the praiseworthy hope that some of the steel industry will migrate to New England, where an infant blast furnace industry did spring up at Chelsea, Mass., during the war. It is also certain that the steel industry is planning to develop the use of the taconite and magnetite deposits. The New York

Times of September 28 reported that a mining company was undertaking at Beaver Bay, Minn., a \$77,000,000 project for producing a high-grade concentrate from taconite.

The role of the railroads in such circumstances is not one of a disputant, but of an inquiring observer of developments. Steel is too important to the railroads, alike as a source of traffic and as an indispensable raw material, for its possible reorientation not to be a matter of concentrated and continuing attention. The railroads can doubtless be a factor of great importance in such a reorientation to the advantage of the country, the steel industry and the railroads alike.

Pride in Workmanship and the Prevention of Smoke

The public is becoming more and more irritated by smoke from locomotives and enginehouses. Railroad managements are concerned not alone because of this public reaction, which engenders bad feelings and is costly in fines, but also because smoke is an evidence of poor combustion or the waste of fuel—not too pleasant to contemplate at any time and particularly so at present, in light of the difficulty of securing a proper grade of fuel for locomotive use and its rising cost. Until comparatively recently the public criticism of smoke from locomotives was more or less centered in the large cities and metropolitan districts; now, as was pointed out at the meeting of the Railway Fuel and Traveling Engineers' Association in September, the smaller communities are becoming more conscious of this nuisance and are taking up the cudgels in the effort to secure relief.

It is true that the abatement of the smoke nuisance on the railroads involves many factors—factors which concern several departments. This means that a very large part of the railroad personnel must be made smoke conscious. But it must be admitted, also, that the men actually in control of the locomotive can perform wonders in smoke abatement if they are continually on the alert and take a real pride in their work. This is clearly evidenced by comparing the records of crews working under similar conditions in the same territory. Man-failures still account for a large percentage of the smoke violations and experienced firemen are said to be responsible to a greater degree than the new men.

What can be done to overcome this indifference or carelessness? Is the problem not one of finding ways and means of appealing to the pride of the enginemen to improve their performance? Certainly, on most roads operating in urban sections, at least, these men have been carefully instructed and pleaded with. With every precaution and mechanical smoke reducing device possible, a poor crew can produce smoke. A capable crew, on the other hand, taking pride in its work, can under ordinary circumstances operate a poorly equipped locomotive, using bad fuel, with a minimum amount of smoke. The public is becoming more and more insistent on smokeless operation. Railroad management and the workers must deliver the goods or suffer the consequences.

Busy Machines Pay the Largest Dividends

The railroads of the United States have about \$150,000,000 invested in maintenance-of-way work equipment; that is, power-driven machines and tools that have been purchased for use by the maintenance forces to permit them to do their job better and more economically. This work was formerly done by hand and the introduction of power-driven appliances to replace these hand methods was started in a small way only about 30 years ago.

Since mechanization has grown so rapidly there is a question whether this growth has not, on some roads, outdistanced the organization and other means that are needed to insure that the maximum return is realized on the investment in maintenance machines. As pointed out in these columns recently, it is important to realize that maintenance-of-way mechanization is now "big business," and that the proper use of the equipment involved is now a matter of sufficient importance to warrant careful attention on the part of officers at the management level. If the present maintenance-of-way organization does not afford adequate means for insuring that maintenance equipment is used to maximum effectiveness, the application of corrective measures is a problem for management as well as of the higher engineering and maintenance officers.

The problem has many facets, of which one of the most important is the necessity of keeping the equipment operating as much of the time as possible. The spectacle of a piece of streamlined passenger equipment standing idle when there is a need for it in hauling passengers would be shocking to any railroad man, for such equipment produces revenue only when it is working. The same principle applies with work equipment. Such equipment is purchased primarily because it earns money by saving labor; hence it produces no return when lying idle. Efficient management can do much to insure that these machines will be kept busy not only during the working season, but even in finding jobs for them during the "off" season, such as the use of weed burners for melting snow and ice at switches.

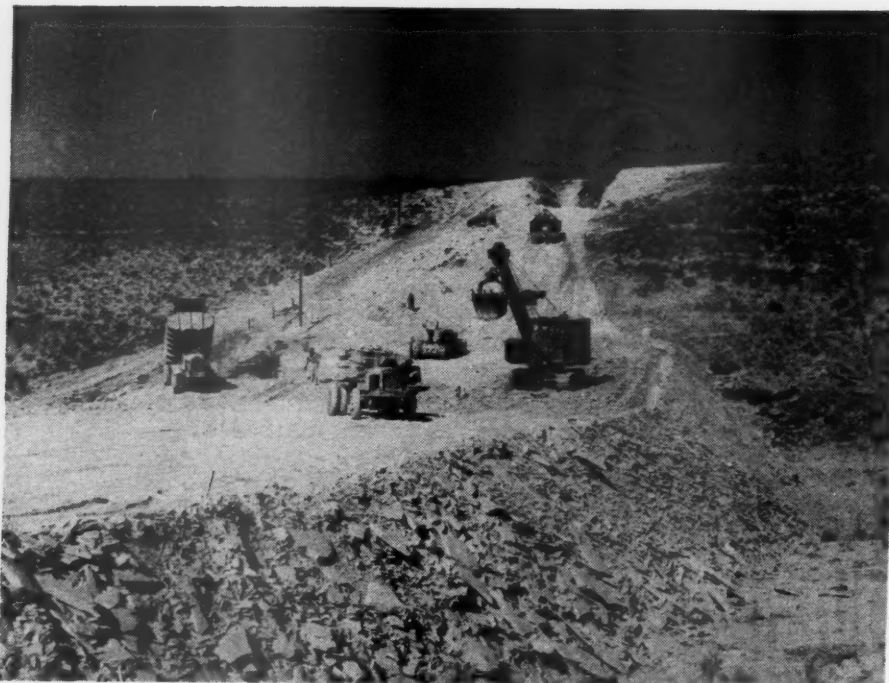
One of the fundamentals in keeping equipment working is to have an adequate organization for repairing and maintaining it, thereby avoiding lost time while waiting for repairs. Another is to have the idea of mechanization so thoroughly integrated in the maintenance department that all work programs are planned with one eye on the need for making the maximum use of machines. This means that the maintenance department must include an organization whose primary responsibility is to see that work equipment is properly maintained and used. It means, further, that this organization should be headed by an officer endowed with the necessary authority to require the proper use of equipment. This officer, in addition, should have at his command an adequate office and field staff to implement the responsibility placed upon him.

Handsome indeed are the returns ahead for the railroad that recognizes the potentialities of complete mechanization, properly administered, of its maintenance-of-way activities, and which proceeds to take measures necessary to their full realization.



The old and new lines in the Pumpville-Malvado territory. Here a double line of 66-in. Armco corrugated pipe culvert took the place of the bridge on the old line at the left

Line Changes on Southern Pacific “Streamline” Train Operation



General view of grading operations, showing one of the shovels and several of the trucks, tractors and scrapers used in the work

RECENTLY the Southern Pacific Lines in Texas and Louisiana placed in service the eighth and final line relocation of a series of changes started in 1943 on its San Antonio division between El Paso, Tex., and Houston. This work through curve reductions and new momentum grades has resulted in a reduction of 25 min. in the running time of passenger trains and 45 min. in the running time of freight trains.

The eight line changes are located on the single-track line between Del Rio on the east, and Sanderson on the west, a distance of 128.34 mi. The separate relocations involved from 0.7 mi. to 5.26 mi. of new construction and have a combined length of 20.23 mi. Individual curve reductions ranged from 10 deg. to a maximum of 4 deg. and, in one case to a maximum of 1 deg. 30 min. Reductions in central angles at the several locations varied from 14 deg. to 581 deg., with a combined reduction of 1,709 deg. Reduction in the length of line for the combined work was 4.1 mi., with that of the separate locations varying from 0.01 mi. to 2.75 mi. The

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A series of eight line relocations on the San Antonio division in western Texas has resulted in saving of 25 min. to 45 min. in running time over the territory

In addition, the combined length of pile trestle bridges on the old alignment was reduced by 1,580 lin. ft. by the elimination of structures at 14 separate locations, and the existing maximum gradient of 1 per cent, although not changed, was improved by providing for momentum grades in the new construction.

Two Considerations

The eighth section of the work to be completed, that between Pumpville and Malvado (location 7 on the accompanying map), was desirable for two main reasons—first, the unfavorable physical characteristics of the section of line involved, and second, the operating difficulties presented, including danger of floods and falling rocks.

Physically, the original line at this point formed the two lower legs of an inverted triangle, which have been eliminated by the new line across the base. Eastward from Malvado the old line descended on light grades and easy curvature for about 1½ mi., and then curved to the right and continued descending in a southerly direction to Lozier, the apex of the triangle. Along this route the roadbed lay between the bed of a canyon on the east and high cliffs on the west. At Lozier, at the bottom of the grade, a 10-deg. curve almost reversed the direction of the line. From Lozier east, the line extended in a northeasterly direction, still generally following stream valleys and deep canyons, to Pumpville, a distance of about 5 mi. This latter section was on an almost continuous grade of 1 per cent ascending.

Due to the heavy terrain in this area, and the character of the soil, which is composed of a sandy loose rock overlying a stratified white limestone, the old line had been subject to washouts and falling rocks over the years, with serious



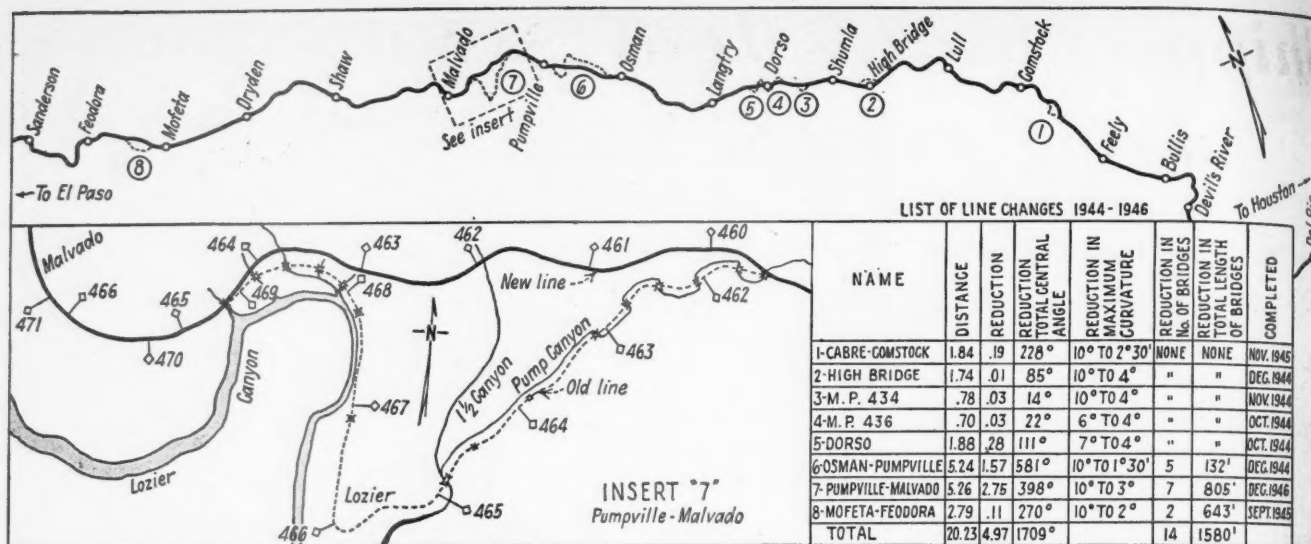
Driving piles in one of the partially-completed trestles on the Pumpville-Malvado realignment



Carving a section of the new roadway out of rock



A 138-in. diameter Armco Multi-plate culvert under the new roadbed section



General plan of the eight line changes together with a table of the engineering information and completion dates. Insert shows Pumpville-Malvado line change in detail

damage occurring in 1906 and again in 1924 and 1935. These conditions, together with the long grades and sharp curvature, led to the decision to seek a more advantageous and economical line.

The plans called for the construction of a new line between Pumpville and Malvado in an almost east-west direction, which, in many cases, would cross the north-south ridges and canyons almost at right angles. While the new line would not eliminate the one per cent gradient, the shorter distance between ridges did permit the designing of momentum grades and eliminated the long ruling grades of the original line. In addition, the more direct alignment produced a reduction of 2.75 mi. in length of line and eliminated 398 deg. of central angle, with the former curves, up to 10 deg., giving way to curves of 3 deg. maximum on the new line.

The work of building the new line involved 410,000 cu. yd. of grading, 65 per cent of which was solid rock; the placing of 14 Armco corrugated iron culverts, ranging from 24 in. to 138 in. in diameter; and the construction of six standard timber trestles, ranging in length from 90 ft. to 255 ft. and varying in height up to 64 ft.

Construction

Top excavation and side barrow accounted for approximately 35 per cent of the grading on the job and was done largely with tractors and carry-all type scrapers. Due to the underlying limestone, however, a large part of the excavation required blasting to permit ready loading and hauling to the adjacent embankments. Drilling for blasting was done by means of air-powered wagon drills, while loading and hauling was done by shovels, trucks, Dumpsters

and work-train dump cars. In most cases the initial embankment was placed with steep slopes and a minimum top width of 12 ft., employing the tractor-scraper equipment and trucks and Dumpsters. After this, track was laid and work-train service was utilized to fill out the embankments to standard width. Work trains usually included from 12 to 15 twenty-yard air-dump cars, and hauls averaged about 1¾ mi. This combination of grading methods resulted in speeding up the work and reducing the truck overhaul requirements.

Cuts were made to a standard calling for a width of 26 ft. at subgrade and ¼-to-1 side slopes. Embankments were built up to a 22-ft. top width, with slopes ranging from 1¼-to-1 to 1½-to-1, depending upon the character of the filling material. The largest cut is 58 ft. deep and the highest fill 60 ft.

The 14 culverts placed are of various lengths and sizes and range from a 24-in. Armco corrugated pipe to a 138-in. Armco Multi-plate opening. The 138-in. Multi-plate culvert is located under a 25-ft. fill and is the largest such installation on the Southern Pacific Texas and Louisiana lines. The use of corrugated iron pipe culverts aided materially in reducing the number of bridges required on the new line.

The six timber trestles required on the new line were, for the most part, constructed with 8-pile bents on 15-ft. centers, with open-type deck, the deck consisting of two four-ply stringers and 8-in. by 8-in. ties spaced on 12-in. centers. All timber was treated with a 50 per cent creosote—50 per cent crude oil solution by the Rueping process. The piles were treated to a 16-lb. retention, while the remainder of the timber was given a 12-lb. treatment. Piles were

driven by a track-mounted pile driver and steam hammer, and as the various bents were completed they were tower braced. Because of the shallow penetration obtained, due to the underlying limestone, most of the bents were encased at the base in reinforced concrete pedestals, secured by doweling to the solid rock.

Other Features

The track structure on the new line consists of 90-lb. second-hand rail on 7-in. by 9-in. creosoted pine ties spaced 22 in. center to center. The ballast is slag to a depth of 8 in. below the bottoms of ties, and the ballast section has a finished width of 15 ft. As mentioned previously, the track structure, exclusive of the ballast, was built in connection with the grading and was used by work trains in widening the embankments. Second-hand rail was used to prevent damage to new steel before the subgrade becomes stabilized. Later, the new line will be relaid with new 113-lb. steel.

On this section of the work, between Pumpville and Malvado, speeds have been increased from 30 m.p.h. to 60 m.p.h., with a resultant saving of 9 min. for passenger trains and 16 min. for freight trains.

The work was carried out under the general direction of H. J. McKenzie, chief engineer of the Southern Pacific Texas and Louisiana lines, with B. W. Cook, assistant engineer, in direct charge in the field. The grading was done under contract by the Spencer Construction Company, Carrollton, Tex., while the track work, trestle and culvert construction, and signal installations, were carried out by company forces.

Shippers Boards Told No Early End to Freight Car Shortage in Sight

Hear Faricy and Colonel Johnson on car supply at 11th annual meeting, in St. Louis, as carloadings reach 17-year peak

INCREASE of the overall supply of freight cars was the principal subject before the delegates to the 11th annual meeting of the National Association of Shippers Advisory Boards, held at the Jefferson Hotel, St. Louis, Mo., on October 28. Major addresses were given by William T. Faricy, president of the Association of American Railroads, and Col. J. Monroe Johnson, director of the Office of Defense Transportation, at a luncheon sponsored by the national association and the Traffic Club of St. Louis.

In his opening remarks, Carl Giessow, president of the shippers' association, declared that while the railroads were breaking records in the movement of freight, service currently is inadequate. In this connection, Mr. Giessow referred primarily to the shortages of freight cars which, to a large measure, he attributed to wartime allocations of material.

In reply to the question, "What are we going to do about the car shortage?"

directed to him from the floor, Mr. Faricy told the association that more cars are on order than the builders can turn out in a year and a half at their current rate of production, and that the railroads, in their own shops—the function of which is primarily to keep existing cars in good order—had undertaken to build 1,500 cars each month, and had surpassed that quota, producing as many as 2,000 new freight cars in recent months. Despite the car shortage, Mr. Faricy said, "so far this year more carloads of freight have been loaded and moved than in the same elapsed period of any of the war years, and with fewer cars."

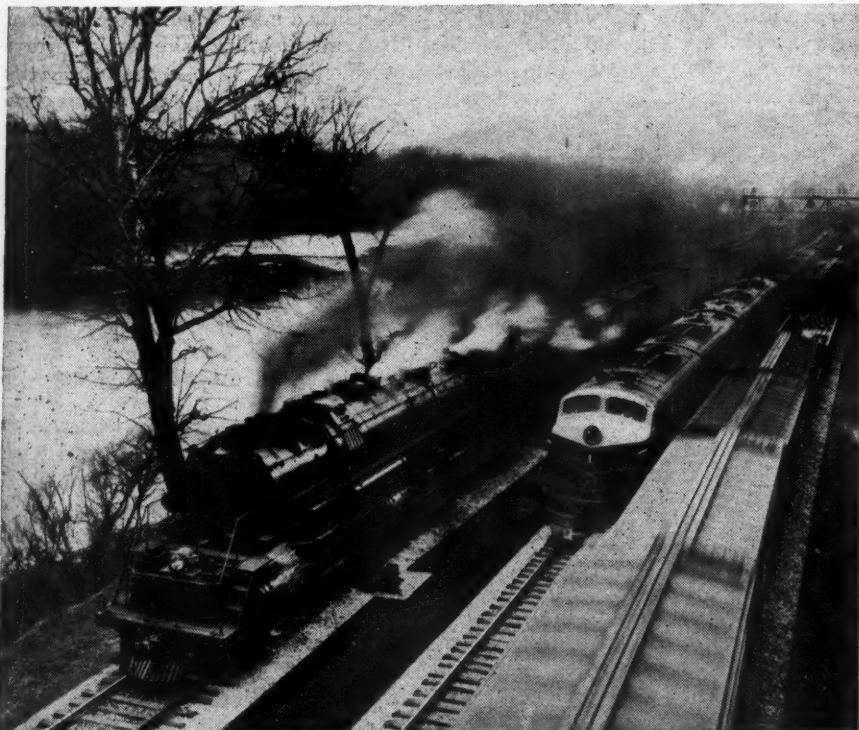
To reach a 17-yr. peak in carloadings during the second week of October, it had required "all the toil and sweat of this great industry" together with the aid of the shippers working toward this common interest, Mr. Faricy said. The A.A.R. head pointed out that this great transportation service was being performed at freight rates which had in-

creased but slightly in relation to the increased costs of other commodities and to the operating expenses of the railroads themselves. The railroad industry, Mr. Faricy asserted, has doubled its basic efficiency in the past 25 years—a fact made possible only by the expenditure of \$13 billion for plant improvements.

Col. Johnson also dwelt upon the car shortage, stating that its end was not in sight. "Twenty million more people in the United States, all demanding transportation, and millions scattered all over the face of the earth, using our transportation to keep from starving and freezing," will keep our railroads short in car supply for some time to come, he stated. These burdens are superimposed on the ordinary need for transportation.

During the war, the War Production Board, regarding the demands of the Army and Navy as "sacred," Col. Johnson continued, paid little heed to the great need for construction of new freight cars, upon which victory was so heavily dependent. Today, a "big thirst for steel" by all its consumers limits the supply to the railroad industry and to the car builders, and some of it which does reach the car builders goes into the construction of equipment for export. So long as we continue to meet the insatiable market abroad—and there is evidence of expansion of the foreign aid program—the O.D.T. director declared, the car shortage will last. A possible answer, he suggested, is a further improvement in the prevailing high state of efficiency in railroad transportation.

Referring to suggestions for the speeding up of freight trains, Col. Johnson noted that the average freight car is in motion but 2.9 hr. per day, and that an increase in the continuous movement of



October carloadings reached peaks which required all-out shipper-carrier cooperation to maintain quick turn-around time of freight cars

cars, rather than an increase in road freight train speeds, is necessary to accomplish car savings. "For every additional minute of the day that the average freight car is in motion, 10,000 additional freight cars are made available," he asserted. With reference to Interstate Commerce Commission Service Order No. 778, which fixes a 48-hr. limit on freight car stops (the effective date of which has been postponed from November 1 to November 20) he stated that, if the carriers thought penalty demurrage was effective in stimulating shipper handling of cars, this order, together with the recent advances in per diem, should have the same effect.

Frank J. Rebhan, vice-president of the association, reported on the activities of the Car Efficiency committees. A summary of regional responses to an inquiry relative to the effect of strikes, the five-day work week, penalty demurrage, and carrier failures on car detention, is presented in the table.

Warren C. Kendall, chairman of the Car Service Division of the A.A.R., noted an improvement in car ownership, the month of September being the first month of the year when installations exceeded retirements. Summarizing car distribution for the first nine months of 1947, Mr. Kendall offered the following statistics showing the distribution of all types of cars:

	East	South	West
Per cent ownership	42	22½	35
Per cent of all cars on line	44	19	37
Per cent of loadings accounted for	40	23	37
Per cent of average daily shortages	37	18	44

(Percentages do not all add up to 100 because of cars on non-reporting lines and in Canada and Mexico).

Mr. Kendall thinks that the supply of all types of cars will remain tight through 1948, although shortages may be less severe than in 1947.

Review of Legislation

Thomas L. Preston, general solicitor of the A.A.R., summarized the status of pending legislation having a bearing on the railroad industry. In mentioning the Bulwinkle bill, Mr. Preston warned that "too much might easily be taken for granted on the strength of the large vote by which the House passed the bill in the 79th Congress," as this legislation "continues to meet opposition in certain quarters, notably the Department of Justice." He explained how pending measures to afford relief from excessive payroll taxes needed to maintain increased benefits provided by the Crosser act, amending the retirement and unemployment insurance statutes, would eliminate sickness, injury and maternity benefits and substitute a sliding scale of tax rates, depending on the reserve fund.

Enactment of the Jennings bill, which

Regional Board	Regional Boards' Reports on Current Problems			
	Strikes	Five-Day Week	Penalty Demurrage	Carrier Failures
New England	minor interruptions	no effect as shorter work week also reduces loadings	does not accomplish its purpose	no instances reported
Atlantic States	some instances	no comment	very little effect	several instances
Allegheny	considerable account strikes and work stoppages account fuel shortages	larger industries working six and seven days	only slightly reduced	handling failures direct with roads with excellent results
Great Lakes		(no report)		
Ohio Valley	minor interruptions	not noticeable	does not accomplish its purpose	some complaints
Midwest	not excessive	not serious — not generally observed	reduces car detention	carriers doing creditable job
Southeast	minor interruptions	not serious — not generally observed	debatable	negligible
Southwest	no comment	not serious	does not accomplish desired results	many complaints
Trans-Missouri-Kansas	minor interruptions	not serious	does not accomplish its purpose	many complaints, especially engine failures, yard congestion and insufficient power in service
Northwest	minor interruptions	recommends industry work seven days	reduces car detention	many complaints indicating letdown on part of shipper and carrier labor
Central Western	negligible	not generally observed	unjustly penalizes firms with good performance	handling direct with roads with excellent results
Pacific Northwest	minor interruptions	not noticeable	has not accomplished desired results	minor complaints
Pacific Coast	some difficulties — mostly waterfront	not serious — not generally observed	has not accomplished desired results	some complaints account man failures and short power

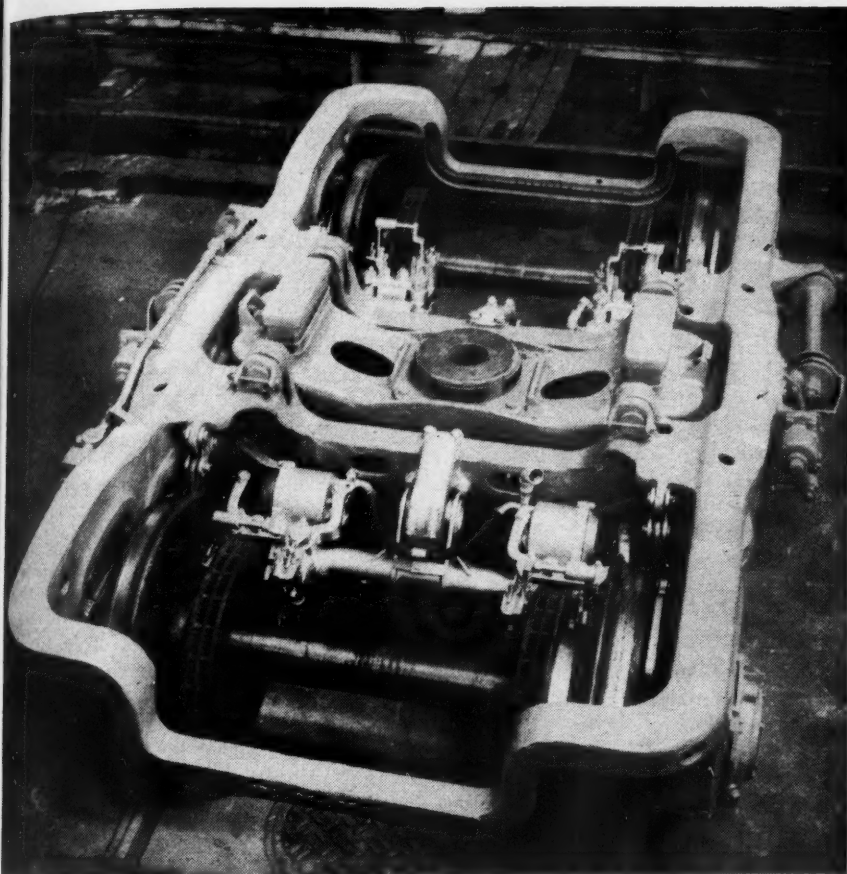
has passed the House by a narrow margin and is presently before the Senate Judiciary committee, would remove from the Federal Employers' Liability Act the special venue provisions permitting actions to be instituted at any place where the defendant is doing business. Beside exorbitant verdicts resulting from these suits, they necessitate undue absences of railroad operating men called from far-away places to testify. Mr. Preston cited the case of an Oakland (Cal.) attorney who handled 650 personal injury cases against railroads, few of which were local.

Mr. Preston warned that joint resolutions under consideration which would appear to make the St. Lawrence waterway project self-liquidating were deceptive; that, on the basis of a 1941 study by the Department of Commerce, it was apparent that resulting revenues would amount to only one-half the amount necessary to meet annual costs required to make the project self-liquidating. He dealt also with the need for a general revision of the Internal Revenue Code, and, specifically, repeal of the excise taxes on amounts paid for transportation of persons and property. Mr. Preston described favorable action on all this pending legislation as being of the greatest importance in the preservation of our free enterprise system which is, to a large measure, dependent upon continuation of private operation of the railroads.

Irving M. Peters, traffic manager of the Corn Products Refining Company, reported on the activities of the national management committee, of which he is chairman. Citing the need for continuous progress in perfect shipping practices, Mr. Peters stated that reports from the regional advisory boards showed convincingly that efforts of the "Perfect Shipping" campaigns had accomplished much good. He recommended that every carload shipper have copies of bulletins obtainable from the Freight Loading & Container section of the A.A.R., complying with practices therein recommended unless he has found a safer way to afford minimum protection to his shipments. "For the year ending April 30, the claim payments by railroads were about \$102,534,000, divided 30 per cent l.c.l., 70 per cent carload," Mr. Peters pointed out.

Election of Officers

Carl Giessow, director, transportation bureau, Chamber of Commerce, St. Louis, was re-elected president of the association. Also re-elected to office were: Warner B. Shepherd, assistant general traffic manager, Aluminum Company of America, first vice-president; F. J. Rebhan, traffic manager, American Crystal Sugar Company, Denver, Colo., second vice-president; and F. J. Armstrong, traffic manager, U. S. Radiator Company, Detroit, Mich., secretary.



The Budd Model CF disk brake applied to a passenger-car truck

Budd Disk Brake Perfected to Reduce Stopping Distances

SINCE the war's end the Budd Company has improved its railway disk brake which has been in service many millions of car-miles. The chief improvement lies in the greater capacity which the brake now possesses for handling heavy inertia loads at high speeds under the greater torques attending rapid decelerations. In addition, the mechanical design of the brake has been refined without departing from its original basic arrangement. The design has been simplified with emphasis on the longevity of wearing parts and accessibility which permits a quick change of brake shoes.

Deceleration Rate

From its inception the chief aim of the brake has been to reduce materially the stopping distances of trains from high speeds. According to the manufacturer, the perfected Model CF disk

brake will stop a passenger car without discomfort to its patrons from 60 m.p.h. in less than 1,000 ft.; from 80 m.p.h. in less than 1,600 ft. and from 100 m.p.h. in less than 2,500 ft.

Heat Dissipation

Thermal requirements presented a far greater problem than the development of the greater torque necessary to produce the shorter stopping distances. The total energy is far greater, because of the higher speeds, and because of the overload incident to the underbraking of the locomotive and cars with a lower braking capacity which may be in the same train.

Not only is there a greater total energy to be converted into heat and subsequently dissipated, but the rate of this conversion is much higher due to the higher decelerations and greater mass of energy. The fundamental design

of the Budd disk brake was based on the recognition of this problem, with the result that service temperatures of shoe and disk do not exceed critical limits. In this manner heat checking of the disk and dusting of the lining is prevented.

The high insulating quality of the lining of the shoe forces the heat to enter the cast-iron disk, which, by virtue of its rotation, large cooling area and multiple fins that serve as a Sorroco blower, readily dissipates the heat to the atmosphere, without a build-up of temperature sufficient to cause dusting and abnormal wear of the brake lining.

The brake has sufficient thermal capacity to handle inertia loads of 25,000 lb. per brake, or 200,000 lb. per car, from speeds of 100 m.p.h. This increased thermal capacity, which has been developed from an exhaustive study of shoe design, enables the brake to cope with the imposed overloads which are encountered in mixed train operation.

The number of parts has been reduced to a minimum. Spring-loaded and oversize pins and bushings have been employed to minimize wear.

Reports of brake-lining life on the Chicago, Burlington & Quincy Vista Dome cars, with a total weight of 160,000 lb. at the rails, indicate an average of 75,000 to 105,000 miles. Vital parts, such as pins and bushings reveal relatively small wear. Seventy per cent higher wheel life has been reported, due to the removal of the shoe from the tread. Still greater improvement may be found possible if full advantage is taken in the removal of the thermal limitation by arriving at the optimum analysis and hardness of the wheel tread. The brake is silent at all times and so smooth in operation that the passengers are unaware of the high deceleration rates of even emergency application because of the absence of chatter.

The coefficient of friction is substantially constant irrespective of speed, inertia load, shoe pressure, or temperature rise under prolonged applications, as occasioned on mountain grades. Accordingly maximum controllability is achieved since the brake output remains proportional to the brake-cylinder pressure. Thus for a given brake-cylinder pressure a given deceleration obtains irrespective of speed; and speed-governor control, with its added complexities, is not required.

Electric Lines Being Restored in Italy

Most of the war damage has been repaired, but some double-track lines have been reduced to single-track status while traffic is greatly increased — New construction is planned

ON June 10, 1940, the electrically-operated Italian railways included 3,170 route miles (5,100 km.) of line out of a total net of 10,180 route miles (16,354 km.) operated by the Italian State Railways Administration. There were also 1,188 miles of electrified line out of a total of 3,880 miles operated by private Italian railway companies. The electrified portions included important lines such as the Modane-Turin-Genoa - Leghorn - Rome railway, the Brennero - Verona - Bologna - Florence - Rome - Naples - Reggio - Calabria railway, the Chiasso - Milan - Piacenza - Bologna railway, the Bologna-Ancona - Rome railway, the Tarvisio-Udine-Venice-Bologna railway, etc.

Almost all of the railways connecting the Italian peninsula with the Alpine frontiers had been electrified with the exception of the Simplon railway which is operated with steam motive power from Domodossola to Milan. The Italian military authorities had objected to

By **ANTONIO GIORDANO**

Milan, Italy

the electrification of the Turin-Milan-Verona-Venice railway, and to the so-called Adriatic line from Ancona to Taranto, preferring not to have the whole Italian railway system dependent upon the electric power supply which could be rendered inoperative by war activities. The electric railways in the western part of Italy were and still are operated with the three-phase, a. c. system, while the eastern lines as far north as Milan are operated with the 3,000-volt, d. c. system.

Air raids caused much damage to the Italian electrified lines, and at the end of the war, railway operations in northern and central Italy were badly demoralized. Air raids destroyed most of the overhead structures and substations, and

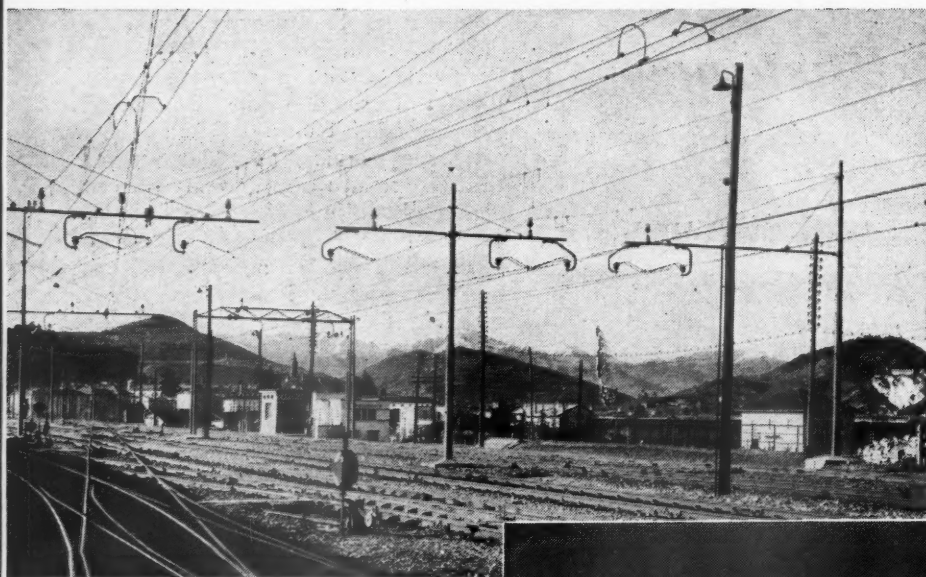
some of the electric power plants were also hit. Bridges were heavily damaged, and in certain cases, such as the Milan-Bologna line and the Milan-Genoa line, the rails were removed by the Germans who transferred them to Germany for the manufacture of war materials or tore them up on their retreat from the south. The old Bologna-Florence electric railway through the Porretta pass was the theater of the fiercest fighting on the "Gothic line," and at the end of the war there was no trace of the railroad except the ruins of some station buildings. An idea of the damages caused by the war to the Italian railway system in general, and to the Italian electric railways in particular, may be had from the following figures:

Railroad Facilities in Service in Italy

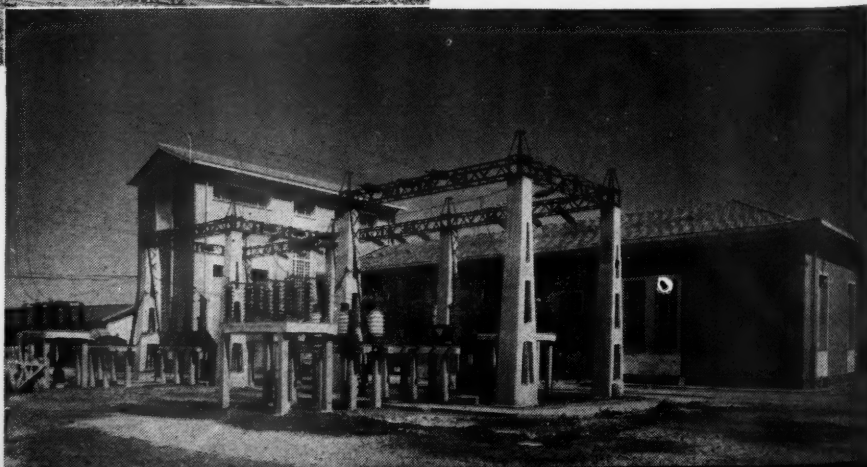
	1939	August, 1945
Single-track lines	7,800 mi.	6,200 mi.
Double-track lines	2,820 mi.	1,240 mi.
Miles of track in terminals ..	4,200 mi.	2,780 mi.
Stone bridges	231	169
Steel bridges	72	40
Steam locomotives	4,136	1,963
Electric locomotives and rail cars	1,798	746
Diesel-engined rail cars	887	131
Passenger cars	8,157	1,457
Baggage cars	4,438	1,312
Freight cars	92	16

Present Status of the Railroads

At present, with the exception of the Bologna-Florence railway through the Porretta, the Leghorn-Rome section of the Modane-Turin-Genoa-Rome railway, and some local railways, all the Italian electric railways are again in operation, with the bridges rebuilt. This includes bridges over important rivers such as the Po, where reconstruc-



Above—The Arona railway station showing the type of overhead construction used on the Milan-Domodossola Simplon line. Right—One of the three substations between Milan and Domodossola on the newly electrified line



tion has required difficult engineering achievements. It has not been possible in all instances to replace double track, as in the case of several sections of the Milan-Genoa line, and the capacity of these lines is much reduced.

The Italian State Railways Administration has not been able to settle all its difficulties. It has not been possible to reestablish the prewar transport capacity of electric railways, such as the Milan-Genoa line, and the traffic demand has been greatly increased by the development of the international transit trade through Italian ports and especially through Genoa and Savona to Switzerland. Also, the coal crisis has hindered steam operation, especially on the Turin-Milan-Verona-Venice railway. This line is about 280 miles long, and must carry the international traffic to France and Switzerland, and eastern Europe.

Electrification Program

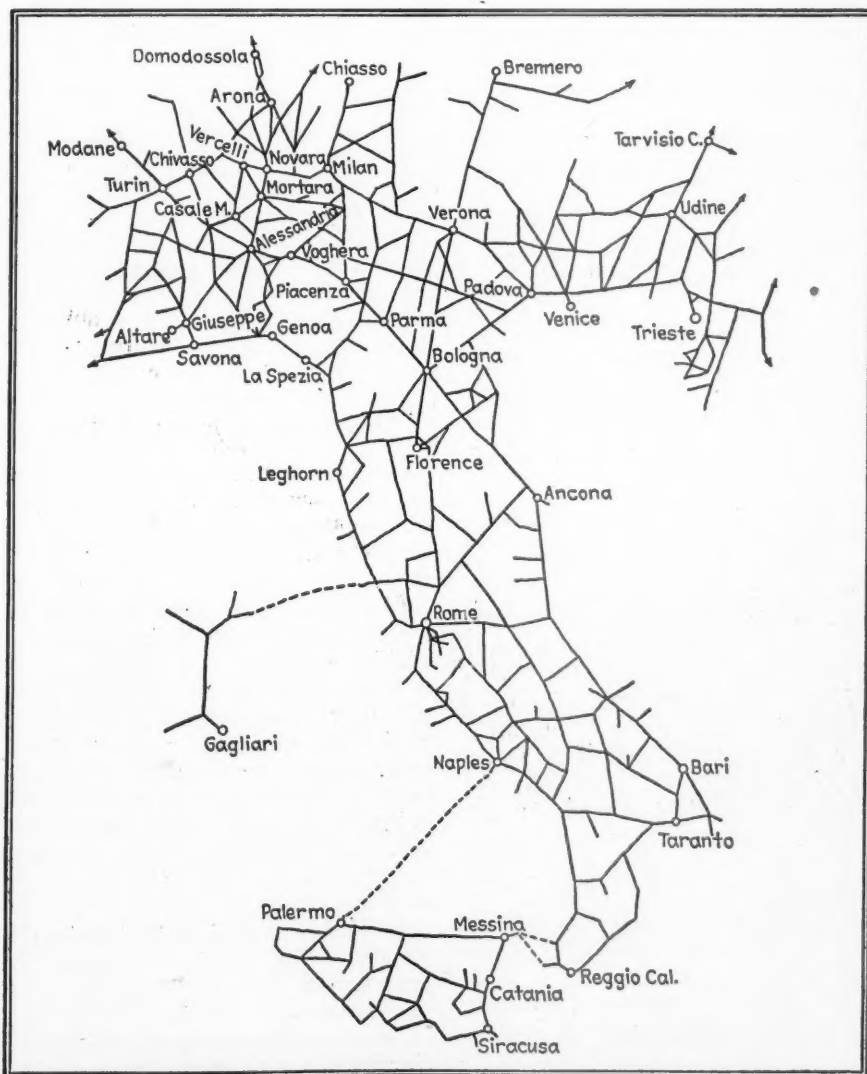
In view of this situation, the Italian State Railways Administration has worked out a program of electrification of railways in northwest Italy which will include first the Domodossola-Milan railway, and the Arona, on the Milan-Domodossola railway, and Novara-Mortara-Alessandria, on the Turin-Genoa railway, to create an additional electric railway between Genoa and Savona and Switzerland. Plans have also been made for the electrification of the Vercelli-Casale-Alessandria, and the Chivasso-Casale railway. Construction has also been started on the new electric line from Savona to Altare and San Giuseppe Cairo which will create a direct connection with the port of Savona. These railways in northwest Italy are to be electrified with the three-phase, a. c. system, except those leading directly to the Simplon line. The three-phase system was selected because the whole Turin railway terminal, known as Porta Nuova, is electrified with such a system, and the employment of the 3,000-volt d. c. system would involve the change of locomotives entering Turin. Furthermore, the employment of the 3,000-volt d. c. system would require the construction of at least 100 new electric locomotives, which is practically impossible at present owing to the shortage of copper. Consideration has also been given to the Milan-Genoa electric railway connections and to the electrification in northeast Italy. Diesel-engined articulated trains, built by Fiat before the war and recently replaced in service, have failed in their operation on the Turin-Milan-Verona-Venice line. Genoese shippers have suggested that service between the port of Genoa and its hinterland be supplemented with an

electric cableway, while the Italian State Railways Administration insists upon the necessity of increasing the power of the electric locomotives sufficiently to permit increase of train weights from the present 900 tons to 3,000 tons. If in addition, the 3,000-volt d. c. system were extended from Voghera to Milan, avoiding the necessity of changing the locomotives, the capacity of the line would be doubled.

To speed up connections between Genoa and central Europe, a program has been projected for the construction of a double-track electric line from Genoa to the station of Borgotaro on the La Spezia-Parma electric line, and the electrification of the railway connections between Parma and Verona. The Verona terminal is to be fully electrified and the administration plans also to have the Turin-Milan-Verona-Venice line and the Padova-Bologna line electrified by 1950. This will complete the electrification of the main railway network in northern Italy. Instructions have been given to the Italian Economic Mission in New York to undertake the

purchases of the copper necessary to complete the electrification of the Leghorn-Rome railway and of the Porretta line between Bologna and Florence.

According to the statements made by the former Italian Minister for Transports, Ingegnere Ferrari, a decision has been reached to complete the electrification of the Sicilian railways by 1955. The lines to be electrified include the Messina-Catania-Siracusa line, the Messina-Palermo line, and the Palermo-Catania line. The Societa Generale Elettrica della Sicilia has already been requested to arrange appropriate electric centers to supply the necessary power for the operation of these electric lines, while the Italian Treasury has taken upon its shoulders the cost of creating an electric connection through the Strait of Messina to join the Italian peninsula high tension system with the Sicilian high tension system. Arrangements have also been made by the Italian State Railways Administration to have 20 articulated electric trains with a speed of 93 miles an hour built by the Italian engineering industry.



Principal railroads in Italy showing cities on electrified lines

Future Passenger and Freight Cars

Economic problems of light weight—More attention to maintenance in design and better maintenance facilities needed—More standards and research recommended

THE railways need 100,000 new box cars and 200,000 freight cars of other types. The Office of Defense Transportation has urged a production rate of 10,000 new cars a month. Obviously, if new cars are installed at the rate of 10,000 a month and 7,000 cars a month are retired, it will take over eight years to make a net gain of 300,000 cars and realize any measurable attendant improvement in performance and reduction in maintenance expense. The rapidity with which the railways are able to retire obsolete cars, and thereby substantially reduce their freight-car maintenance expenditures, will depend largely on the success with which car-building facilities meet the demand for increased production.

The American Railway Car Institute is the authority for the distribution of the freight car inventory by age groups, shown in Table I, from which it is noted that 21 per cent are over 30 years old and that 31 per cent are over 25 years old, the age at which they would

Table I—Freight-Car Inventory Distribution by Age Groups

Age group, years	Number of cars	No. of cars, cumulative	Per cent of total	Per cent cumulative
Over 30	369,048	369,048	21.128	21.128
26-30	178,920	547,968	10.243	31.371
21-25	436,077	984,045	24.965	56.336
16-20	246,182	1,230,227	14.094	70.430
11-15	74,559	1,304,786	4.269	74.699
6-10	240,158	1,544,944	13.749	88.448
1-5	201,777	1,746,721	11.552	100.000

normally be retired by prewar standards.

Obviously, it is more expensive to maintain an old car than its newer counterpart and a progressively higher annual repair bill is observed. In 1938 the average repair cost per car was \$77.75, a figure which had risen to \$212.69 in 1946. Of course, rising labor and material costs have their effect, but not of the order indicated. During the last five years almost \$1,000, on the average, was required to maintain each car, irrespective of age, or approximately \$200 per car per year. When this is related to the \$212.69 average cost which obtained in 1946, the penalty suffered by failure to retire older equipment is evident.

The nation's passenger-car inventory is even more obsolete than its freight-

By L. K. SILLCOX

First Vice-President, New York Air Brake Company

car ownership in that 70 per cent of the passenger cars are over 20 years of age, while but 56 per cent of the freight cars have attained that age (Table II). That the railways have permitted their pas-

Table II—Passenger-Car Inventory Distribution by Age Groups

Age group, years	Number of cars	No. of cars, cumulative	Per cent of total	Per cent cumulative
Over 30	15,643	15,643	39.757	39.757
26-30	3,320	18,963	8.438	48.195
21-25	8,608	27,571	21.878	70.073
16-20	7,030	34,601	17.867	87.940
11-15	1,111	35,712	2.824	90.764
6-10	2,577	38,289	6.550	97.314
1-5	1,057	39,346	2.686	100.000

senger cars to grow so old before replacement is indeed unfortunate. Unlike the freight car, railway travelers, both actual and potential, observe the obsolete passenger cars daily and in the case of the former group suffer discomfort through being subjected to their deficiencies while traveling. It is imperative that this condition be rectified if the railways are to retain their portion of the total passenger-miles.

Problems of Light Weight

Recently, the interest of the railways has been stimulated towards acquiring a considerable number of new lightweight cars, both for coach and Pullman travel. Some disparage the advantage obtained through weight reduction in the car shell, because, it is argued, the addition of extra features and attractions considered necessary for increased passenger comfort and convenience render the modern car of a weight order approaching the conventional car. Granted these special features are required, the added weight would be necessary with the latter type construction, and the net saving is in the end as great.

A further radical reduction in the weight of the car shell is difficult of procurement, because of the necessity of maintaining a sufficiency in strength of structure. Therefore, study of further decrease in weight will generally be confined to the accessories, such as

trucks, brake equipment, air-conditioning apparatus, heating details, and other fittings and equipment.

While the utilization of lightweight materials reduces the haulage cost, or increases the payload, it also increases the first cost of the equipment. This increase in cost is relatively small where high-tensile alloy steel is displacing carbon steel, but it is quite high where aluminum alloys are used. How far the higher cost is justified under various conditions has been given considerable study. There are still too many uncertain factors to furnish a definite picture regarding the construction of aluminum cars. The advantages of making extensive use of high-tensile alloy steels are beyond dispute, however, particularly since these materials are also more resistant to corrosion and abrasion, and will therefore increase the life of the car. They are basically indispensable in view of the trend toward increased speed of trains.

Relate Design to Maintenance

We destroy benefits secured by our efforts to reduce weight in the provision of unnecessary non-revenue space which is not demanded by a major portion of the traveling public. For example, the vestibule, an efficient buffer for absorbing collision shocks, thereby protecting human lives, is removed in the interest of light weight, but the next car may be a tavern car with merchandise display cases, or it may be a play car for children with an attendant, thus nullifying several times the weight saved by the removal of a safety feature of car construction.

Dining cars are attached to all trains except for the shortest runs, on the correct assumption that passengers must be fed. It is readily granted that this service must be provided, but why use as much space and take as much time as we do in the ordinary case? Incidentally, meals served in a modest fashion and standardized could be offered at a markedly reduced price from those necessary with present-day dining service. Many coach passengers can ill afford conventional dining-car prices and leave disgruntled with the impression that they were overcharged, when in reality the service was provided at a loss.

This article is adapted from a paper presented before the Canadian Railway Club at Montreal, Quebec, on October 20.

Inseparable from a discussion of car design and construction is the problem of adequate maintenance. A consideration of this phase of railway engineering is all too often minimized by railway management. Therefore, design evaluation must, of necessity, embrace a study of present practices purely from the viewpoint of the maintenance officer. He appreciates that, if new designs of today are going to return to their owners sufficient revenue to offset the twofold or greater increase in prices the railways must pay for new equipment, such equipment must be used at least twice as intensively or more than heretofore, and this can only be done if in operating procedure and design preventive measures are taken to remedy those items that (1) cause failures en route with consequent train delay, and (2) require frequent removal from service, thereby reducing availability and increasing maintenance costs.

The principal offenders causing train delay are hot boxes, brake rigging, stuck brakes, couplers and draft gear, air hose, wheels, and broken pipes.

Principal offenders in reducing availability and increasing maintenance costs are wheels, air brake cleaning, couplers and draft gear, brake beams, broken pipe, and jacking and packing journal boxes.

It will be noted that hot boxes are given priority as a troublesome element in providing continuous and safe operation. The corrective roller bearing long ago supplanted the solid-type bearing in passenger service and would serve likewise if applied in freight service. But, can we afford this luxury? This is a question of paramount importance and should be answered at the earliest possible date.

More Standardization Needed

The use of lighter, stronger, and more durable materials constitutes one of the major advances in future car construction. In view of this trend the problem of deflection must be considered. In other words, the use of smaller sections, which is possible with high-tensile steels, will give greater deflection than previously experienced if present construction standards are followed.

This advance is intimately associated with the questions of standardization and simplification of design which have received much attention in the research of the last decade. The work of the Association of American Railroads and the American Railway Car Institute in producing standard designs and revising them in accordance with changing conditions has effected the elimination of unnecessary separate parts and the simplification of details, as well as of the car as a whole. In addition to the strength and sturdiness thereby secured

in integral construction, it has, by standardizing dimensions and capacities, simplified the problems of loading and interchange.

The necessity for further progress in this direction is emphasized by the advantages from the standpoint of maintenance. Simpler and stronger designs, reduced in number so that all car owners will be familiar with them, will greatly reduce repair costs and the necessity of holding cars out of service, permit uniform repair practices, and materially speed up interchange.

One of the most important items of car design, particularly from the standpoint of increasing train speeds, is the truck. In view of the large variety of different designs and the resulting number and complexity of truck details, the principal need is for simplification and greater standardization than is at present exhibited.

Some Special Features

Two basic designs should be developed: one for speeds up to 60 miles per hour, suitable for freight trains, and one for higher speeds in passenger trains, except streamline trains. For the former, the conventional friction snubbing devices would be sufficient. The latter would call for adaptation of each journal to individual shocks and for increased spring travel. Otherwise, the main variation will be in the increased strength of parts for the high-speed truck. Detailed investigations and tests will be necessary to determine how far each of these designs will call for such features as lateral cushioning devices, steel wheels and tubular axles. For high-speed trucks, consideration should be given to locked center pins or interlocking bolsters, derailment safety guides, spring-pad lubricators or roller bearings. Definite standards should be established in spring and snubber groups for the various capacities.

Many are familiar with special freight cars equipped for the automobile industry to facilitate loading and unloading of automobiles, trucks, and parts for assembly plants. The trend toward such specially equipped cars probably cannot be stopped unless the railways wish to invite the danger of losing some of their most profitable traffic to competitors. Efforts should be made, however, to direct this trend, so that the installations will not render the cars unsuitable for general service or increase empty car mileage.

Similar conditions of special demands are encountered in passenger-car construction. Although standardization and simplification must be our ultimate aim, it should insure latitude for individual efforts to provide maximum safety and comfort to the traveling public. A number of features are no doubt

desirable for standardized equipment. Among them will be the more extensive use of plastics and of various sound-proofing and cushioning materials. Many improvements are still possible in insulating, lighting, heating and air conditioning (free from drafts). In some new coaches, separate baggage compartments are installed with electrically operated shelves loaded from the outside and accessible from the inside, which have eliminated much of the difficulty in the handling of luggage. This is only one example of the many ways by which time en route may be saved and the demands of the traveling public can be satisfied.

The designers and manufacturers of airplanes have had the advantage of the most advanced and concentrated research in connection with the war effort, which has speeded up the progress of aviation engineering beyond anything equivalent in railway car-construction engineering. It is one of the railways' main tasks to channel in the railway direction as many of the benefits of recent technological developments as possible.

Heretofore, this has been done only in a rather haphazard and indifferent manner. The cooperation of the equipment manufacturers in solving such problems is essential. However, centralized direction must be provided by the railways themselves in order to secure sufficient active response for needed progress in practice. The problem is nationwide and must be dealt with on a national scale, within the capacities of a most modern method of self-organization.

Is the Best the Cheapest?

Those who decide as to the details of railway equipment are not likely to resort to any makeshift designs, but on the other hand, they are so often governed by the pressure of first-cost considerations that a risk is ever present of stopping far short of the best.

It should be emphasized that the failure of but one car part may remove the car from service with the attendant loss of utilization and revenue which accumulates while the unit is awaiting or undergoing repair. This truism stresses the necessity for the proper design of a vehicle, adequate in all its component parts and constantly maintained. Some well-informed transportation men believe that this line of expense, due to avoidable defects of track and equipment, if figured correctly, would amount to as much as the maintenance accounts themselves.

One is constrained to emphasize the necessity for the provision of more than conventional maintenance facilities in this period of accelerated schedules involving extremely complicated equip-

ment. Such equipment cannot be properly maintained in the ordinary coach yard. Shelter against inclement weather must be provided if the necessary standard of repair is to be obtained. Surely the undergear and trucks will not be properly inspected or repaired when allowed to remain covered with ice and dirt while in the originating terminal. That a maintenance program, repair facilities and stand-by protection be planned before equipment is ordered is as important as are the design details to which so much thought is directed.

It is not necessary for name trains to operate at excessive speeds to maintain their schedules, but any intermediate delay, attributable to equipment design or defects or to any other cause, immediately requires a decision whether to exceed scheduled operating speeds, or to bring an important train into its terminal behind schedule. The railways must strive to obtain high average speeds without the necessity of excessive maximum speed. Any defect in car equipment, either because of improper design or inadequate maintenance, immediately jeopardizes the objective.

Air-Brake Advances Reviewed

In the endeavor to keep abreast of the demand for rolling stock capable of handling traffic economically, it is not at all surprising that there is to be found evidence of unequal development in the long list of essential items entering into train equipment. Great as the advancement has been, it has taught no lesson more thoroughly than that ample opportunity still exists for improvement. The brake equipment of our trains serves as a good illustration: Vast improvements have been made; no class of car and locomotive apparatus or construction has been given more thorough study or yielded more consistent and gratifying results.

Taking the normal weights of trains and average speeds at the time the air brake was introduced, as compared with the trains and speeds of today, the weight per vehicle, as well as average speed, has not only increased eight times, but the quantity of energy to be destroyed is certainly 15 times as great. In order to meet the added demands of modern service conditions as efficiently as heretofore, means must be provided for dissipating the total energy stored up in such a swiftly moving mass at least at an equal or higher rate. In fact, it is desirable to do this in the least time, consistent with comfort to passengers or effect on lading and accuracy of control in the case of service stops, and in as much shorter distance or time as may be possible in the case of emergency.

The friction obtainable between the wheel and rail and shoe and wheel is the basis on which we must start, and

upon which we are limited, as to the amount of retarding force obtainable. Therefore, of first importance in designing an air-brake installation is due consideration to the contact between the wheel and rail and the possible efficiency of the brake shoe.

The air brake in itself is practically limitless in the amount of force obtainable, but where the line must be drawn is at the practical application of this force. In this regard, it is worthy of note that the brake shoe today has about four times as much work to do as it had twenty years ago. The chief effect of this, however, is to destroy the brake shoe at a much more rapid rate than formerly, without permitting any material shortening of the relative stopping distance.

With the latest pneumatic equipment, the maximum brake-cylinder pressure can be obtained throughout a modern train of 18 cars in 7 to 8 seconds. For the purpose of shortening this time, the electro-pneumatic brake is employed to reduce the time of full application to 4 seconds, the shortest deemed advisable from experience, and to obtain simultaneous application of all brakes. In this manner stops are shortened, time is saved, and train shocks are minimized. Furthermore, the electro-pneumatic brake provides a rapidity and flexibility of service brake control unattainable by any other means and comparable to that of a single vehicle, such as a street car.

Research Suggestions

Car departments are charged with an almost impossible problem in the selection of the various components which combine to comprise a freight or passenger car. They have several designs, advanced by as many manufacturers, to choose from when selecting draft gear, wheels, roller bearings, trucks and as lowly an item as a draft-key lock pin, to mention but a few. This is not said in criticism of any manufacturer of any product, nor of the Association of American Railroads in approving the several competing designs. The association has established specifications which have proved to be safe and otherwise satisfactory for the service intended, and each product fully meets those specifications. But there is a tremendous waste of effort and capital expended by the railways each year in testing equipment designs and materials, much of which is duplicated by other railways. There is everything to recommend the partial or entire pooling of the research of the several manufacturers of a given product, with the best elements of each being chosen for one standard for the industry.

Railway mechanical officers, realizing this problem, have from time to time

advocated extending the functions of the A.A.R. Research Committee to include a competent research laboratory, which would not only bridge the gap between available knowledge and practical requirements, but would also make the best efforts of individual administrations accessible to all of them, acting as a central clearing house for authentic information and its direct application to equipment construction. It would supplement and strengthen the present committees by a permanent engineering staff, devoted to both fundamental and applied research on a scale which would be comparable to that of the aviation industry, where it has been almost immediately translated into transportation service. It would make use of all available ideas originating within the engineering staffs of individual railways, coordinating them with the experience records of the past and the basic requirements of present-day standardization, simplification, and maximum utility.

The association is the logical clearing house for such problems. It has conducted investigations and tests in the laboratories of member roads, universities, and private industries, and a tremendous amount of continuous, beneficial, and reliable investigation has resulted. For example, a freight-car axle design for each capacity of car has been adopted as standard, and, after many years of research, a standard axle for passenger cars has now been established which gives improved fatigue strength. During the investigation comprehensive studies were made in connection with the effect of flame hardening, cold rolling, relief grooves and pulley fits. Had the work been extended sufficiently, information could have been developed in advance of service failures with regard to traction axles fitted with roller bearings, which experience has shown require a relatively low working stress.

Mandatory Pooling

A satisfactory program could be established to provide for mandatory pooling of advantageous features established as essential in the design finally adopted as standard and most suitable for interchange service. Manufacturers wishing to participate as an accepted source for basic car parts could thus be induced to supply articles of one standard design proved by authentic tests to be the most satisfactory. The first design agreed upon and tested should not be considered as final, but should be revised and kept up to date as the result of continuous study, based on experience and changes resulting from service requirements.

Such an organization could serve well to assist railways in selecting and devel-

(Continued on page 53)



Stores officers are finding that the use of pallets and mechanized equipment is saving time and money. Scene at the New York Central's Collinwood, Ohio, storehouses

Heartening Rise in Materials Buying

August purchases of supplies and fuels rose 4 per cent from July but equipment buying took a big nose-dive

TOTAL purchases of equipment, materials and supplies, and fuels dropped 18 per cent in August from July's total of nearly \$224,000,000. Equipment buying, which in the last several months had been instrumental in keeping purchases on a high level, was mainly responsible for this drop. However, since the buying of other items rose somewhat, the average monthly expenditures remained above \$200,000,000.

It will be noticed from the following tables that buying of crossties was relatively heaviest of all the manufactured items, and helped to bring the total of manufacturers' products up to less than one per cent below purchases of similar items during the month of July. Fuel outlays were mainly responsible for the rise of 4 per cent in total purchases. Once again inventories showed a rise from the previous month, reaching the total of \$738,709,000, an increase of slightly less than 1 per cent from the

1947 RAILWAY PURCHASES

The small amount spent for equipment during August was the main factor in the decline from July of 18 per cent in Class I Railroad expenditures for materials, fuels and equipment.

	**August, 1947	Cumulative total 1947
Equipment*	\$17,346,000	\$416,274,400
Rail	7,752,000	57,992,000
Crossties	9,047,000	64,274,000
All other materials	93,036,000	726,583,000
Total from manufacturers	127,181,000	1,265,123,400
Fuel	55,415,000	427,599,000
Grand total	\$185,596,000	\$1,692,722,000

* Amount Placed on Order.
** Subject to Revision.

total as of July 1. Scrap and rail led the parade, while all other items were off slightly. This rise in rail inventories was in spite of summer rail laying programs, while the rise in scrap on hand probably was at least partly because of such programs. Inventories of fuel and crossties declined slightly, the latter due no doubt to the tie renewal programs normal to summer operation on the railroads. Fuel inventories were down, probably due to the relatively low fuel purchases during July.

Equipment Ordered

As noted above, orders for equipment were down substantially from July. During August, 2,376 freight cars of various kinds were ordered, at an approximate cost of \$9,266,000. Also ordered were 36 Diesel-electric locomotives and 2 passenger cars. Cost of the former is estimated at \$7,880,000, and of the latter \$200,000.

August* Purchases of Manufactured Goods (Excl. Fuel & Equipment)

Aug. '47 Compared to Other Aug's. (000)			Aug. '47 Compared to Other Months '47 (000)			Eight Month Totals '47 and Other Years (000)		
Year	Amt.	% Change	Month	Amt.	% Change	Year	Amt.	% Change
1941	\$ 72,448	+ 52	Jan.	\$101,888	+ 8	1941	\$412,890	+106
1942	65,085	+ 69	Feb.	92,196	+ 19	1942	586,656	+ 45
1943	75,266	+ 46	Mar.	104,313	+ 5	1943	539,194	+ 57
1944	90,831	+ 21	Apr.	115,189	- 5	1944	682,591	+ 24
1945	87,342	+ 26	May	109,506	+ 1	1945	688,010	+ 23
1946	93,522	+ 17	June	106,048	+ 4	1946	634,031	+ 34
1947	109,835		July	109,973	- 1	1947	848,948	
			Aug.	109,835				

August* Purchases of Rail

Aug. '47 Compared to Other Aug's. (000)			Aug. '47 Compared to Other Months '47 (000)			Eight Month Totals '47 and Other Years (000)		
Year	Amt.	% Change	Month	Amt.	% Change	Year	Amt.	% Change
1941	\$3,873	+100	Jan.	\$7,810	- 1	1941	\$38,368	+ 51
1942	4,620	+ 68	Feb.	7,109	+ 9	1942	39,132	+ 48
1943	4,396	+ 76	Mar.	6,855	+ 13	1943	35,961	+ 61
1944	6,358	+ 22	Apr.	6,843	+ 13	1944	51,213	+ 13
1945	5,977	+ 30	May	7,050	+ 10	1945	48,625	+ 19
1946	6,634	+ 17	June	6,459	+ 20	1946	36,500	+ 59
1947	7,752		July	8,114	- 4	1947	57,992	
			Aug.	7,752				

August* Purchases of Crossties

Aug. '47 Compared to Other Aug's. (000)			Aug. '47 Compared to Other Months '47 (000)			Eight Month Totals '47 and Other Years (000)		
Year	Amt.	% Change	Month	Amt.	% Change	Year	Amt.	% Change
1941	\$4,297	+111	Jan.	\$7,179	+ 26	1941	\$32,057	+100
1942	5,609	+ 61	Feb.	6,704	+ 35	1942	45,513	+ 41
1943	8,156	+ 11	Mar.	7,930	+ 14	1943	50,963	+ 26
1944	7,532	+ 20	Apr.	8,819	+ 3	1944	57,691	+ 11
1945	6,594	+ 37	May	8,165	+ 11	1945	47,241	+ 36
1946	8,032	+ 13	June	8,174	+ 11	1946	58,460	+ 10
1947	9,047		July	8,256	+ 10	1947	64,274	
			Aug.	9,047				

August* Purchases of Other Materials

Aug. '47 Compared to Other Aug's. (000)			Aug. '47 Compared to Other Months '47 (000)			Eight Month Totals '47 and Other Years (000)		
Year	Amt.	% Change	Month	Amt.	% Change	Year	Amt.	% Change
1941	\$64,278	+ 45	Jan.	\$86,800	+ 7	1941	\$442,465	+ 64
1942	54,856	+ 70	Feb.	78,383	+ 19	1942	502,011	+ 45
1943	62,714	+ 48	Mar.	89,528	+ 4	1943	452,270	+ 61
1944	76,941	+ 21	Apr.	99,527	- 7	1944	573,687	+ 27
1945	74,771	+ 24	May	94,291	- 2	1945	562,144	+ 29
1946	78,856	+ 18	June	91,415	+ 2	1946	539,071	+ 35
1947	93,036		July	93,603	- 1	1947	726,583	
			Aug.	93,036				

August* Purchases of Fuel

Aug. '47 Compared to Other Aug's. (000)			Aug. '47 Compared to Other Months '47 (000)			Eight Month Totals '47 and Other Years (000)		
Year	Amt.	% Change	Month	Amt.	% Change	Year	Amt.	% Change
1941	\$30,527	+ 82	Jan.	\$58,490	- 5	1941	\$218,554	+ 96
1942	35,468	+ 56	Feb.	54,612	+ 1	1942	274,708	+ 56
1943	45,403	+ 22	Mar.	57,447	- 4	1943	351,199	+ 22
1944	47,954	+ 16	Apr.	51,486	+ 8	1944	401,397	+ 7
1945	45,402	+ 22	May	51,490	+ 8	1945	374,618	+ 14
1946	49,419	+ 12	June	50,177	+ 10	1946	354,768	+ 21
1947	55,415		July	48,482	+ 14	1947	427,599	
			Aug.	55,415				

August* Total Purchases (Excl. Equipment)

Aug. '47 Compared to Other Aug's. (000)			Aug. '47 Compared to Other Months '47 (000)			Eight Month Totals '47 and Other Years (000)		
Year	Amt.	% Change	Month	Amt.	% Change	Year	Amt.	% Change
1941	\$102,975	+ 61	Jan.	\$160,279	+ 3	1941	\$ 731,444	+ 75
1942	100,553	+ 64	Feb.	146,808	+ 13	1942	861,364	+ 48
1943	120,669	+ 34	Mar.	161,760	+ 2	1943	890,393	+ 43
1944	138,785	+ 17	Apr.	166,675	- 1	1944	1,083,988	+ 18
1945	132,744	+ 24	May	160,996	+ 3	1945	1,032,628	+ 24
1946	142,941	+ 16	June	156,225	+ 6	1946	988,799	+ 29
1947	165,250		July	158,455	+ 4	1947	1,276,448	
			Aug.	165,250				

* Subject to revision.

August* Inventories of Rail

Aug. '47 Compared to Other Aug's. (000)

Aug. '47 Compared to Other Months '47 (000)

Year	Amt.	% Change	Month	Amt.	% Change
Aug. 1, 1941	\$25,159	+ 13	Jan. 1, 1947	\$39,192	- 27
1942	21,847	+ 30	Feb.	31,447	- 9
1943	19,035	+ 50	Mar.	31,217	- 9
1944	23,190	+ 23	Apr.	29,775	- 4
1945	26,332	+ 8	May	26,875	+ 6
1946	24,205	+ 18	June	27,990	+ 2
1947	28,509		July	26,536	+ 7
			Aug.	28,509	

August* Inventories of Crossties

Aug. '47 Compared to Other Aug's. (000)

Aug. '47 Compared to Other Months '47 (000)

Year	Amt.	% Change	Month	Amt.	% Change
Aug. 1, 1941	\$55,976	+ 54	Jan. 1, 1947	\$83,891	+ 3
1942	58,520	+ 47	Feb.	88,293	- 3
1943	57,536	+ 50	Mar.	92,861	- 7
1944	75,004	+ 15	Apr.	97,549	- 7
1945	66,422	+ 30	May	89,906	- 4
1946	78,698	+ 9	June	89,782	- 4
1947	86,066		July	88,686	- 3
			Aug.	86,066	

August* Inventories of Other Material

Aug. '47 Compared to Other Aug's. (000)

Aug. '47 Compared to Other Months '47 (000)

Year	Amt.	% Change	Month	Amt.	% Change
Aug. 1, 1941	\$265,886	+110	Jan. 1, 1947	\$476,625	+ 17
1942	394,600	+ 41	Feb.	490,734	+ 14
1943	376,295	+ 48	Mar.	498,159	+ 12
1944	422,002	+ 32	Apr.	519,985	+ 7
1945	449,821	+ 24	May	535,071	+ 4
1946	458,774	+ 22	June	542,696	+ 3
1947	558,118		July	553,227	+ 1
			Aug.	558,118	

August* Inventories of Scrap

Aug. '47 Compared to Other Aug's. (000)

Aug. '47 Compared to Other Months '47 (000)

Year	Amt.	% Change	Month	Amt.	% Change
Aug. 1, 1941	\$10,264	- 4	Jan. 1, 1947	\$12,572	- 21
1942	9,366	+ 5	Feb.	11,929	- 17
1943	9,258	+ 7	Mar.	17,017	- 42
1944	9,682	+ 2	Apr.	11,221	- 12
1945	9,280	+ 6	May	12,766	- 23
1946	11,460	- 14	June	10,929	- 10
1947	9,880		July	9,239	+ 7
			Aug.	9,880	

August* Inventories of Fuel

Aug. '47 Compared to Other Aug's. (000)

Aug. '47 Compared to Other Months '47 (000)

Year	Amt.	% Change	Month	Amt.	% Change
Aug. 1, 1941	\$29,299	+ 92	Jan. 1, 1947	\$49,873	+ 13
1942	50,586	+ 11	Feb.	51,164	+ 10
1943	58,216	- 4	Mar.	52,234	+ 7
1944	64,515	- 13	Apr.	51,207	+ 10
1945	56,248	- 1	May	55,973	+ 1
1946	46,625	+ 20	June	56,510	- 1
1947	56,135		July	56,565	- 1
			Aug.	56,135	

August* Total Inventories

Aug. '47 Compared to Other Aug's. (000)

Aug. '47 Compared to Other Months '47 (000)

Year	Amt.	% Change	Month	Amt.	% Change
Aug. 1, 1941	\$386,581	+ 91	Jan. 1, 1947	\$653,153	+ 13
1942	534,913	+ 38	Feb.	673,567	+ 10
1943	520,340	+ 42	Mar.	691,487	+ 7
1944	594,353	+ 24	Apr.	709,738	+ 4
1945	608,103	+ 21	May	720,591	+ 3
1946	619,762	+ 19	June	727,307	+ 2
1947	738,709		July	734,253	+ 1
			Aug.	738,709	

* Subject to revision.

B. & O. "Sentinel Service" Pays Off

Road declares its money and effort well repaid by increased business and satisfaction of patrons evidenced by many letters

ALTHOUGH it was introduced as recently as March 3, 1947, the Baltimore & Ohio's "Sentinel Service" for carload freight shipments already has brought tangible rewards in increased traffic offerings, which, according to the shippers themselves, would not otherwise be forthcoming, and in the satisfaction of old customers, given evidence in hundreds of unsolicited letters and oral expressions of commendation. Concurrent therewith, the new service has definitely tightened up the railroad's operating organization because, as one B. & O. traffic department officer puts it:

"When we put in Sentinel, we stuck our necks out; the fat was in the fire; we had to perform."

Aims at Dependability

"Sentinel Service," in brief, provides: (1) automatic records for the siding-to-siding control of carload freight of all types, except certain bulk commodities, between some 30 principal cities on the B. & O., including interchange gateways for interline traffic; (2) handy, complete reference information for shippers on facilities and cut-off and placement times at Sentinel points, and, (3) personalized traffic plans for each customer to whom the service is available.

In the detailed description of the service which appeared in *Railway Age* of June 7, page 1156, it was emphasized that the new service was designed to make existing freight schedules more dependable by giving shippers and receivers definite times of cut-off and placement and notifying both of them whenever the scheduled service is, for some reason, interfered with. Speed-ups in advertised transit time have not been an essential part of the service.

Originally, the road's advertising theme for Sentinel was "Ask our man," in the belief that the primary task was to acquaint the shipping public with the features of the service and to encourage fullest realization of the "blue book" guides and traffic plans made available as essential features thereof. That phase is now virtually ended, and the B. & O. proposes to publicize the proven advantages of Sentinel. That the advantages are proven is indicated by the interest which other railroads, shippers off and on line, and students of trans-

portation have displayed in the service.

Recently, a B. & O. freight traffic man was invited to address a general staff meeting of a western road, at considerable length, despite the fact that meetings of this magnitude are held only once or twice a year, because they take the time of many valuable officers. The president of the host road expressed himself as satisfied that the time spent conferring about the details of the B. & O. experience was wisely apportioned.

Hundreds of letters have been received from industrial traffic managers commenting favorably on Sentinel, many of which mention increased traffic offerings as a tangible show of appreciation. Some of them admit that the writers were skeptical that any railroad could execute the service according to announced plans in these difficult days, but assert that this attitude soon disappeared.

Wrote an official of a chamber of commerce: "You will perhaps recall that I expressed some skepticism as to the ability of any carrier to provide service such as was offered. However, contact with a number of our shippers has completely eliminated any skepticism and I congratulate you on this most progressive step in providing efficient transportation."

An important shipper asserted: "We have been receiving our freight with a greater degree of dependability since Sentinel has been in effect. Credit should be given the B. & O. for this advance in the handling of railroad freight traffic." Another shipper expressed complete satisfaction when he wrote: "All we ask is that this more dependable service we have been experiencing continues."

Automatic Records a Boon

The automatic notification of both shipper and receiver whenever a Sentinel car gets off schedule has brought particularly enthusiastic response, especially from national concerns whose need for coordinated notifications of central, regional and plant traffic offices, in varying combinations, has been satisfied by special modifications of the routine of the automatic records headquarters in Baltimore, Md.

Commented an officer of an oil company: "It has always been beyond me

that the railroads did not notify patrons regarding cars cut out, and I am glad to see that the B. & O. is taking the initiative in this direction." After thanking the B. & O. for notifying him automatically of a car cut out for brake rod repairs, the traffic man of a chemical concern promised: "With this type of service, we shall certainly make every effort to apply B. & O. routing whenever possible." The traffic manager of a large chain of food stores asserted that notification of a cut-out car had been especially valuable, because it enabled the receiving point to rearrange the layout of newspaper advertising copy without serious inconvenience, to indicate that the product in transit would not be available.

The traffic department of a large brewery clips the cut-out reports to its shipping orders on file, for reference in the event of complaints by customers or claims.

Tracing Is Cut

Notification of the receivers of freight has been particularly appreciated by shippers, because it relieves the shipping point of the onerous task of handling traces whenever the customer calls up and says, "Where is my car of —?" Under Sentinel Service, the customer is assured either that the car will be received before or at the placement time indicated in his B. & O. traffic plan, or that he will be notified that it has been delayed. Further, he knows that the shipping point will also be notified and will take action to send a substitute shipment, if advisable. As a result, it is probable that he will not call the shipper at all. A traffic manager, reputed as "a hard customer," voluntarily wrote the B. & O. to express his pleasure at the fact that his customers were being notified of delays in transit, and complimented the road on the speedy reforwardings it had made of cut-out cars.

Helpful Off-Line Too

Off-line shippers or receivers benefited from Sentinel Service by obtaining definite commitments on pulls and placements at interchange points covered by the plan and by automatic records for the B. & O. portion of the haul. Wrote one receiver located off-line: "We are

able to plan our transactions and production with a greater degree of certainty due to on-time arrivals — or notification—of needed materials." An ex-skeptic, who once commented that the service would not benefit off-line shippers, has since written that "my freight service as a whole has been improving" and that "Sentinel Service deserves a certain amount of credit for this improvement."

Requests have been received for copies of the "blue books" and an explanation of the workings of Sentinel from a large number of schools and colleges, including the University of Baltimore, University of Michigan, Golden Gate College and College of Advanced Traffic.

Additions to Service

Since *Railway Age's* original article on Sentinel Service was published, the B. & O. has added to the tools of the service its so-called traffic plan pouches and has in preparation a national, or off-line, "blue book." The former is an envelope containing relevant pages from the "blue books," furnished to small shippers or those interested in only a few routes, for whom the complete point-to-point data in the individual city "blue books" would be superfluous. It has proven highly successful in winning traffic. The national, or off-line, "blue book" will be simply an adaptation of the original city "blue book," designed to aid the head traffic offices of national concerns or off-line firms having an interest in all or most points served by Sentinel, but not in one origin city, which the individual city books are designed to satisfy. The binder will contain space for 40 "city packages," in which will be inserted the information regarding cities served by the shipper and a special index page.

Communications Important

Sentinel Service is greatly aided by modern communications. For this and other purposes, the B. & O. has put in teletype facilities at some 18 additional terminals since Sentinel was inaugurated and has extended and intensified its private telephone circuits. To speed interoffice communication, teletype machines have been installed in the Detroit and Milwaukee agencies and additional off-line installations are under consideration. As a general thing, Sentinel Service increases the routine use of communications facilities by railroad forces themselves, but it decreases the use thereof in connection with inquiries by shippers and receivers for tracing information, because they receive notification automatically through regular channels.



B. & O. box cars advertise "Sentinel Service"




Supervision of Sentinel Service—the most important element of its operation—is centered at the Sentinel Service bureau in the office of the general superintendent of transportation at Baltimore, Md.

The automatic records bureau at Baltimore disseminates vital information to the separate traffic offices



A New Service for Passengers Who Like to Read



STOP · LOOK · READ!

**FOUR OUTSTANDING BOOKS ARE
AVAILABLE ON THIS TRAIN**

THE MONEYMAN
By Thomas B. Costain \$3.00

THE PRINCE OF FOXES
By Samuel Shellabarger \$3.00

HONOR AMONG THIEVES
A Crime Club Mystery \$2.00

WOMAN OF PROPERTY
By Mabel Seeley \$3.00

**ANY WAITER, PORTER, OR
COACH ATTENDANT WILL
BRING YOU YOUR CHOICE**

A NEW SERVICE OF THE AMERICAN RAILROADS

ONCE again the railroads of America are offering an added service to help make the journeys of their passengers more enjoyable. This is one which will make available for purchase on the train four of the best-selling books of each month, including one mystery, at the regular retail price. It has already been adopted by a number of railroads of the East and South, while others not yet participating are indicating active interest in it. Operation of the plan on at least 40 trains will start on December 1.

The idea for this service came from a couple of men who rode trains on long trips and were frequently bored riders—P. B. Slover, of Nashville, Tenn., and E. W. Mitchell, of Fort Lauderdale, Fla. After talking to some of their railroad friends, who thought the idea a good one, they went out and sold it to railroads and publishers alike.

Sold by the Steward

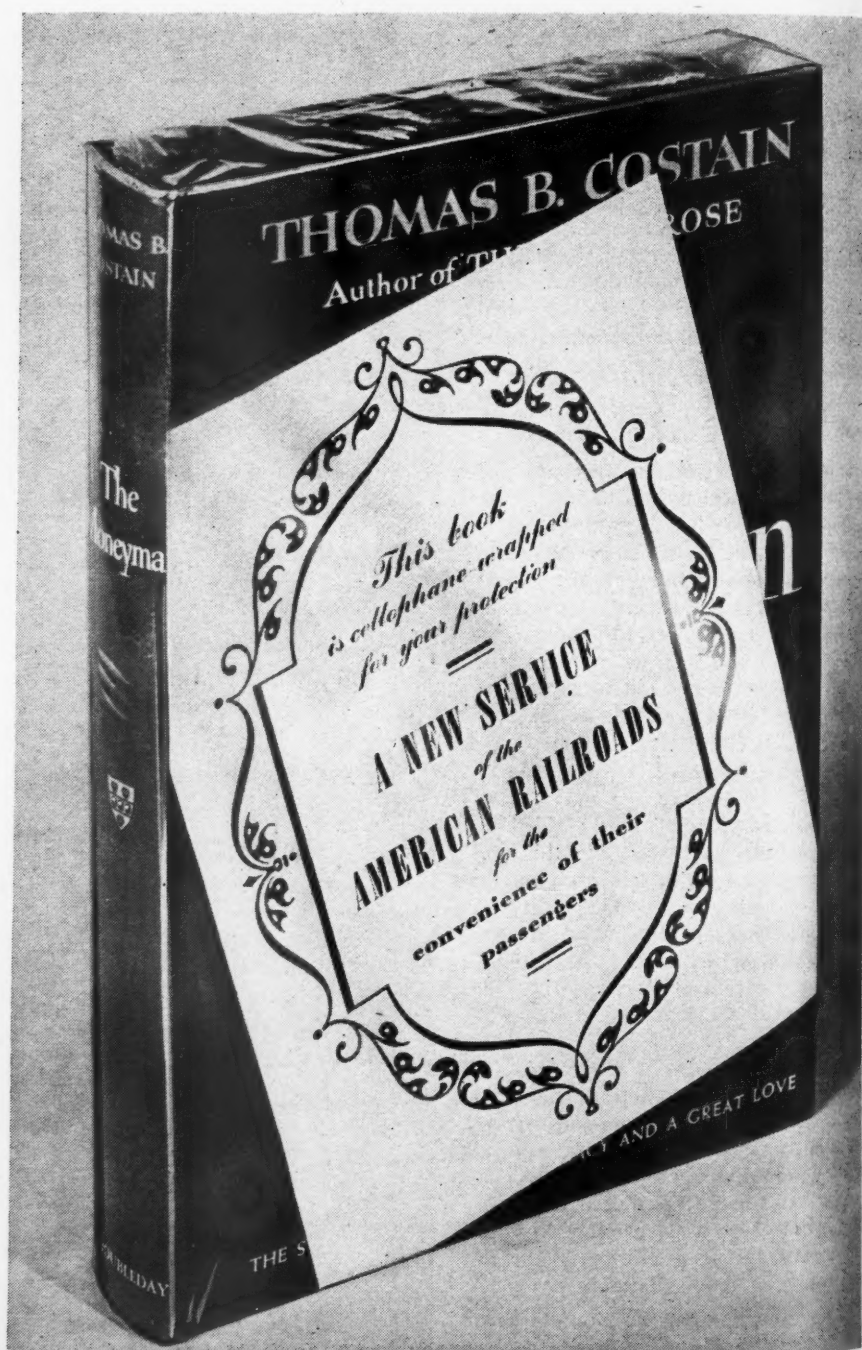
Every month four best-selling books are delivered to the individual railroad in mutually satisfactory quantities. The books will be sold on the train—in most instances by the dining car steward, for many of the roads have decided that the steward, since he already handles the railroad's money, is the logical man to handle this transaction. The steward will requisition the books and promotional literature from the commissary in

the same manner as other items carried.

The books will not be hawked through the cars. Each railroad will decide on which of its trains the books will be sold, and notices will be placed in the dining car and also perhaps at each seat

in the coaches or sleepers. The notice carries a brief review of each book. If the passenger desires he may have a porter, waiter, or coach attendant go to the steward and procure any of the books for him. In order that the passenger may be protected from being sold a used book, and to insure cleanliness, each one is wrapped in cellophane; inside the wrapper is a notice similar to the one shown in the photograph, except that each railroad will have notices bearing its own insignia. Each road's name

Left—These cards will be at each place in the dining car and distributed through trains on which the books are sold. Below—Books sold to passengers will be wrapped in cellophane; the sticker will carry the name and insignia of the individual railroad



The notice
each book
may have a
pendant go
any of the
t the pass-
being sold
cleanliness,
ane; inside
lar to the
oh, except
tices bear-
ad's name

will also be on the other promotional literature.

This plan has been made possible by the cooperation of Doubleday & Co., who will supply the books of all publishers. Messrs. Slover and Mitchell, and Doubleday & Co., have made the plan a feasible one, and possibly a very profitable one, by allowing the railroads to return all unsold books at the end of the month, a privilege the bookseller does not ordinarily enjoy. Also, the organization behind this plan, the Railroad Book Plan absorbs the cost of all promotional and advertising work. Even if directly measured financial profits are not great, this plan is expected to do much to increase the good will of the passenger, and assure him that his comfort and well-being are a matter of concern to the railroads.

Future Passenger and Freight Cars

(Continued from page 46)

oping uses for new materials and new applications for old materials. This function would be carried out in providing published reports to members on independent laboratory tests and service experience of individual railways.

A Freight-Car Handicap

The fact that some freight cars spend most of their useful life on foreign lines is not a good reason for slighting their design, material or construction. To minimize the hesitancy of car owners to suffer the initial burden of cost incident to the use of the best adapted construction necessary for light weight and the provision of improved accessories, a premium per diem rate should be authorized for cars so constructed and equipped. In this way the owner is at least partially compensated for the increased capital investment and the operating carrier pays for the advantages gained from the more efficient equipment.

Under present conditions of turbulent material and wage prices any estimate of increased capital investment required for lightweight construction can quickly become meaningless. Furthermore, there is a serious question that current quotations provide valid forecasts for the cost of material, facilities, and services which might apply at the time full-scale production could be obtained.

In a recent report released by the Subcommittee for Engineering and Mechanical Research of the Railroad Committee for the Study of Transportation, Association of American Railroads, results of study of a justifiable price to

Real Aid for Europe or Merely Endless Hand-outs?

National defense, with the world in its present shape, is America's most important business.

One of the principal weapons of defense now being actively promoted is the so-called "Marshall Plan" for large-scale donations of American products to Europe—the purpose being "to save the world from Communism and chaos." Henry Hazlitt, economist, unsurpassed in the lucidity of his reasoning and writing on questions of national policy, has produced a pamphlet, "Will Dollars Save the World?,"* in which he examines critically the assumption that they will. Will these proposed donations actually accomplish the purpose—or will they be just so much more of our resources thrown away, like "lend-lease" to Russia and postwar relief contributions from the U. S. A. to the area behind the "iron curtain" which were channeled exclusively to Reds and their satellites?

Mr. Hazlitt exposes the folly of the treatment meted out to a Germany so stripped of productive capacity that Americans have to shell out hundreds of millions to keep the Teutons from utter starvation; while, in addition, neighboring friendly countries are impoverished because they need German goods and trade. "In using unintelligent means to prevent Germany from again becoming a menace to the world, we have made it a burden to the world," the author asserts, and proves.

Extra Effort Not Rewarded

Practically all the European countries which are seeking aid, Mr. Hazlitt points out, have unbalanced budgets—kept that way by lavish and increasing outlays for "social security," for food subsidies, and to meet the expense of nationalizing their industries. Taxes are so high that unusual exertion, either by business management or labor, brings little or no extra reward—hence extra exertion is lacking, and production lags. Prices of

necessities are rigidly controlled, so little incentive exists to produce them—as a consequence, productive effort is diverted to luxuries.

Reason for Europe's Plight

European currencies are valued at an arbitrarily high level in relation to the dollar—so European goods are priced high for Americans, and American goods are cheap for Europeans, a condition which encourages imports and discourages exports, the very opposite condition required to correct the European "dollar famine."

Mr. Hazlitt concludes that it is not primarily the effect of the war but the colossal complex of governmental interferences with normal economic behavior which has brought Europe to its present desperate plight, and keeps it there. He does not oppose American food relief to meet immediate necessities, but he contends that there can be no cure for Europe's distemper until the Europeans start producing, and they will not and cannot produce so long as present political obstacles to production remain. America, which produces only 12 per cent of the world's food, cannot feed the whole world or even a substantial part of it, as a permanent arrangement.

It isn't necessary to agree completely with every assertion by Mr. Hazlitt to profit from his clear-headed analysis. This country has a vital interest in European revival, but we shall be the very opposite of helpful either to Europeans or ourselves if we bolster and encourage behavior by them which must inevitably make their troubles worse, rather than solve them. As the weekly news letter "Human Events" epitomizes the situation, "America cannot merely drop money with negligent good will in the lap of a legless man, saying 'Here fellow, grow yourself some new legs.'"

* Published by the Foundation for Economic Education, Irvington-on-Hudson, N. Y. Price, 75 cents.

pay for weight reduction are presented. The results vary over a wide range between the various railways examined and the territories through which they operate. However, it would seem that the average based upon current conditions would run between four and five cents per pound for freight-car weight reduction only.

The Primary Objective

This estimate does not include any reduction in weight based upon a reduction in the number of cars attributable to higher revenue load capacities, which is very intangible.

The problems of car construction originate as traffic problems. They consist briefly of a desired end-result for delivering the maximum of ton-miles and passenger-miles in the most economical and effective manner. Therefore, it is necessary to formulate these problems on the basis of existing demand, as well as in terms of available ways and means for meeting such demand.

If cars, both passenger and freight, are to be a point of contact with a restless and dissatisfied public, there remains no alternative but that of an honest attempt to satisfy that public the best we know how to do.

GENERAL NEWS

9 Months' Net Income Totalled \$316,000,000

Net railway operating income
for the same period
was \$557,744,853

Class I railroads in the first nine months of this year had an estimated net income, after interest and rentals, of \$316,000,000, as compared with \$105,000,000 in the corresponding period of 1946, according to the Bureau of Railway Economics of the Association of American Railroads. The nine-months net railway operating income, before interest and rentals, was \$557,744,853, as compared with \$366,819,199.

Estimated results for September showed a net income of \$21,150,000, as compared with \$39,800,000 in September, 1946, while the net railway operating income for the 1947 month was \$47,979,446, as compared with \$67,510,230 in September, 1946. In the 12 months ended with September, the rate of return averaged 3.6 per cent, compared with 1.94 per cent for the 12 months ended with September, 1946.

Abnormal Showing in 1946—"Comparisons of railroad earnings for 1947 with those of 1946," the A. A. R. statement said, "should take into account the fact that the first six months of 1946 included a period of industrial disturbances, work stoppages and railroad wage increases, and railroad earnings were for that reason abnormally low. Statistics for September, 1947, include the wage increase to non-operating employees, effective September 1, but not the interim freight rate increase authorized by the Interstate Commerce Commission as of October 13."

Gross in the nine months amounted to \$6,327,777,373 compared with \$5,621,219,215 in the same period of 1946, an increase of 12.6 per cent. Operating expenses amounted to \$4,958,593,663 compared with \$4,712,544,961, an increase of 5.2 per cent.

Thirty-two Class I roads failed to earn interest and rentals in the nine months, of which 17 were in the Eastern district, 5 in the Southern region and 10 in the Western district.

Class I roads in the Eastern district in the nine months had an estimated net income of \$100,000,000 compared with a deficit of \$3,000,000 in the same period of 1946. For September, their estimated deficit was \$280,000 compared with a net income of \$13,400,000 in September, 1946.

The same roads in the nine months had a net railway operating income of \$222,602,302, compared with \$114,041,790 in the same period of 1946. Their net railway operating income in September amounted to

\$13,581,185 compared with \$26,010,442 in September, 1946.

Gross in the Eastern district in the nine months totaled \$2,895,909,779, an increase of 15.9 per cent compared with the same period of 1946, while operating expenses totaled \$2,332,555,053, or an increase of 8 per cent.

In the South—Class I roads in the Southern region in the nine months had an estimated net income of \$39,000,000 compared with \$5,000,000 in the same period of 1946. For September, they had an estimated deficit of \$70,000 compared with a net income of \$2,400,000 in September, 1946.

Those same roads in the nine months had a net railway operating income of \$72,707,082 compared with \$50,548,468 in the same period of 1946. Their net railway operating income in September amounted to \$4,272,768 compared with \$6,921,199 in September, 1946.

Gross in the Southern region in the nine months totaled \$875,872,304, an increase of 8.4 per cent compared with the same period of 1946, while operating expenses totaled \$698,436,276, an increase of 2.9 per cent.

Class I roads in the Western district in the nine months had an estimated net income of \$177,000,000 compared with \$103,000,000 in the same period of 1946. For September, they had an estimated net income of \$21,500,000 compared with a net income of \$24,000,000 in September, 1946.

Those same roads in the nine months had a net railway operating income of \$262,435,469 compared with \$202,228,941 in the same period of 1946. Their net railway operating income in September amounted to \$30,125,493 compared with \$34,578,589 in September, 1946.

Gross in the Western district in the nine months totaled \$2,555,995,290, an increase of 10.5 per cent compared with the same period of 1946, while operating expenses totaled \$1,927,602,334, an increase of 2.9 per cent.

CLASS I RAILROADS—UNITED STATES

	Month of September	1947	1946
Total operating revenues		\$726,549,842	\$660,412,496
Total operating expenses		588,591,241	529,791,700
Operating ratio—per cent		81.01	80.22
Taxes		75,939,347	49,394,870
Net railway operating income		47,979,446	67,510,230
(Earnings before charges)			
Net income, after charges (estimated)		21,150,000	39,800,000
Nine Months Ended September 30, 1947			
Total operating revenues		\$6,327,777,373	\$5,621,219,215
Total operating expenses		4,958,593,663	4,712,544,961
Operating ratio—per cent		78.36	83.83
Taxes		686,995,599	428,970,410
Net railway operating income		557,744,853	366,819,199
(Earnings before charges)			
Net income, after charges (estimated)		316,000,000	105,000,000

Regional Rate Probe Starts at Chicago

Stockholder, railroad traffic
heads offer testimony
in Ex Parte 166

"The railroads need more money than they are now asking for," Walter S. Franklin, vice-president in charge of traffic of the Pennsylvania, stated at the first of the regional hearings on the railroads' request for a permanent increase in freight rates averaging 27 per cent, held before Division 2 of the Interstate Commerce Commission at Chicago on November 3, and continuing through to November 14. Chairman Clyde B. Aitchison is presiding.

Farm Earnings Up—Pointing out that, while gross farm income doubled and the farmers' net income increased from 44.9 per cent to 54.3 per cent of that gross in 1946 as compared with 1929, Glenn F. Vivian, manager of the Statistical bureau of the Western Railways, testified that "there was little or no change in rates charged by the railroads" on farm commodities over that period. Mr. Vivian presented statistics showing that the railroads lost an average of \$1.61 per ton on ice used in protecting shipments of fresh fruits, meats and vegetables. E. Riggs, assistant traffic officer of the Chicago, Rock Island & Pacific, dealing with rates on farm commodities, stated: "In all fairness, those commodities moving in substantial volume in Western territory, which for so many years have benefited from lower general increases of rate levels than applied to other traffic, should now be required to contribute in full measure to the increase in revenue needed by the western railroads, except where competition or other conditions necessitate different treatment."

R. J. Doss, vice-president of the Atlantic Coast Line, testified that "the proposed increase will not cause the loss of a great amount of traffic by the southern carriers," stating that the roads must reserve the right to meet competitive situations as they arise. Referring particularly to the citrus fruit and vegetable movements, Mr. Doss stated, "If experience should prove the impossibility of maintaining rates . . . higher than those now in effect . . . some subsequent adjustment will have to be made."

E. V. Hill, auxiliary committee, Central Freight Association, submitted evidence to illustrate how equalizations through C.F.A. gateways would be restored if the increases were granted, showing that present base, proportional or reshipping rates from Chicago to all points in Trunk Line and New

England Freight Association territories are only 98.7 per cent of the rates in effect in 1921.

Stockholder Testifies—Described as probably the first stockholder in history to testify in a freight rate case on his own initiative and without benefit of legal counsel, J. Newcomb Blackman, of East Orange, N. J., who described himself as a retired businessman with considerable of his savings invested in railroad stocks, deplored the tardy awards of rate increases to cover retroactive wage increases, and the effect government regulation had had upon the value of railroad securities and suspension of dividends thereon. At this point, Chairman Aitchison held that Mr. Blackman's prepared statement was not factual testimony, whereupon the witness continued extemporaneously in the same vein.

Crossexamination—In crossexamination directed at Mr. Franklin's previous testimony at the Washington (D. C.) hearings on the case, a representative of the shippers asked how the chief traffic officers arrived at maximum increases on certain specific commodities, such as iron and steel—for which a 10 cents per 100 lb. maximum increase is set, and why these maxima were not applied to additional commodities. Mr. Franklin explained that there was no mathematical formula available; that decisions were the result of the best judgment of officers who know what is needed and what increases can be applied to what commodities, while permitting the retention of traffic. To the greatest extent possible, Mr. Franklin, said, increases on a percentage basis are sought.

When shipper counsel asked how the carriers could explain an increase from 7 to 10 cents in the iron and steel maximum, which occurred since the carriers' July, 1947, presentation, Mr. Franklin explained that this upward revision was necessary on account of the non-operative employees' wage award and the increase in prices of materials used by the railroads. In the interval since June 30, Mr. Franklin continued, the cost of steel went up \$5 per ton—the whole level of prices went up. Referring to Ex Parte No. 162, the crossexaminer asked Mr. Franklin if the carriers had lost any iron and steel traffic because of the judgment of the I.C.C. in granting a 10 cent maximum increase when the carriers had asked for only 4 cents, Mr. Franklin said he thought not but that unusual conditions such as car shortages and demands in excess of production qualified this observation. A crossexaminer representing the brewers asked Mr. Franklin if he was aware of the volume of malt beverages moving by truck, and that large-scale decentralization of the industry was under consideration at this time because of increased freight rates. Mr. Franklin questioned the length of haul of truck shipments, citing large movements by highway from a Newark (N. J.) brewery to nearby metropolitan centers and rightfully belonging to trucks. He advised that considerable long-haul malt beverage traffic still moved by rail, and Commissioner Aitchison observed that they had been "hearing the same testimony" every time freight increases were proposed but that this traffic continued to move. The question of main-

tenance of port differentials was raised and Mr. Franklin assured that this matter would be given consideration as it has in the past.

Subsequent regional hearings are scheduled in Salt Lake City, Utah, and Montgomery, Ala., on November 17; in Los Angeles, Cal., on November 21; in Boston, Mass., and Fort Worth, Tex., on November 24; and in Portland, Ore., on November 28. Rebuttal will commence at Washington, D. C., on December 8.

Forest Products Meeting Draws Large Attendance at Chicago

More than 450 persons interested in encouraging and promoting the efficient utilization of wood and other forest products attended the first national meeting of the Forest Products Research Society in Chicago on October 31 and November 1. Those in attendance—totaling three times the number expected—heard some 20 technical papers on the general subjects of: (1) Chemical Utilization of Wood and Integrated Logging; (2) Engineering Aspects of Wood Use; and (3) Preservation and Seasoning.

In connection with the latter topic, Paul D. Brentlinger, forester of the Pennsylvania, presented a report on "The Use of Treated Car Lumber by the Railroads." He told the group that preservative treatment has "about doubled the present cost of the crosstie, but has tripled its average life," and that practically all railroads agree that the treated crosstie is economical to use. He brought out in the course of his report, however, that this same conclusion has yet to be reached with respect to treated car lumber, but that perhaps it would be in future years.

Also addressing the "Preservation and Seasoning" session of the two-day meeting was Monie Hudson, of the Taylor-Colquitt Company, who presented a paper on the vapor-drying process for treating poles and

lumber, which he illustrated with a series of photographs and charts. (This process was discussed at length in two feature articles appearing in *Railway Age* of March 9, 1946, page 494, and March 16, page 538.)

Veterans Urged to Establish Military Credit for Benefits

Railroad employees who are qualified as veterans to receive credit for military service toward retirement and death benefits under the Railroad Retirement Act should file their credentials with the Railroad Retirement Board as soon as possible, it was announced last week. Credentials include a photostatic copy of a military discharge and a statement certifying it to be a true copy. The veteran must also explain any erasures, alterations or insertions appearing on the original discharge papers, in a statement to be signed also by either a representative of the board or a disinterested person. In the latter case, it must be notarized.

It was pointed out that, in order to receive credit for military service under the Railroad Retirement Act, a veteran must have:

(1) Entered military service during a "war service period" (in the case of World War II, September 8, 1939, to date), and

(2) Worked in the railroad industry before entering the armed forces, either in the same year or in the year immediately preceding.

Carnegie-Illinois Steel "Open House" Has 56,000 Visitors

A three-day "open house" was staged at the Homestead, Pa., works of the Carnegie-Illinois Steel Corporation on October 15, 16 and 17. Held in compliance with a request by Pennsylvania's Governor Duff that state industries participate in the celebration

* * *



Pullman-Standard Freight Shop Wins Safety Award

For a record of only six lost-time accidents for every million man-hours worked during last year, the Haskell & Barker plant of the Pullman-Standard Car Manufacturing Company, at Michigan City, Ind., has been presented the company's all-plant safety trophy for 1946. The plant's record was three times better than that established by all railroad equipment units, according to Department of Labor statistics. At the presentation ceremonies were: (to the right of the trophy, from left to right) T. P. Gorter, vice-president of Pullman-Standard; Champ Carry, president; and Wallace N. Barker, executive vice-president. Standing at the left of the trophy, from left to right, are: A. A. Logmann, manager of works; George Kieffer, union committeeman; and Henry A. Kintzele, Jr., business agent of local 290, Brotherhood of Railway Carmen.

of "Pennsylvania Week," the affair attracted a total of 56,008 visitors. Approximately 125 companies had displays on exhibit, among which was the General Motors Corporation's "Train of Tomorrow."

The first day of the showing was reserved for company executives, plant supervisory personnel and representatives of the press and radio. On October 16 the plant was open to the general public and the last day of the affair was reserved for corporation customers, suppliers and various inspection agencies. National awards for safety in industry were presented by the National Safety Congress to the superintendent of all Pittsburgh district Carnegie-Illinois plants during the "open house."

Rodgers Leaves Presidency of Trucking Association

Following through on previously-announced plans, Ted V. Rodgers has retired from the American Trucking Association's presidency which he had held continuously since the association was formed in 1933. Mr. Rodgers' retirement came at A. T. A.'s recent annual convention in Los Angeles, Cal., where he was elected chairman of the board of directors and Edward J. Buhner, president of Silver Fleet Motor Express, Louisville, Ky., was elected to the presidency.

The election marked the inauguration of A. T. A.'s new policy of making annual changes in the presidency. That policy, which also contemplates that the retiring president shall be elected for a one-year term as chairman of the board, was adopted after Mr. Rodgers announced early this year that the term he was then serving would be his last. H. D. Horton of Associated Transport, Inc., was elected first vice-president.

Norris and Baird Address Railroad Women

The National Association of Railroad Women held its third annual meeting at the Grove Park Inn, Asheville, N. C., October 14-16, during which the 21 members attending, representing 12 railroads, heard informal talks by Ernest E. Norris, president of the Southern, and by F. H. Baird, general passenger traffic manager of the New York Central. Besides entering into detailed discussions of those features of railroad passenger service which the ladies have been assigned to supervise or investigate, the members attended several sessions of the American Association of Passenger Traffic Officers which held concurrent — though separate — sessions at the hotel October 15-17, as reported in *Railway Age* of October 25, page 52.

In his short and humorous welcome to the women, Mr. Norris paid a tribute to the women in railroading who helped the roads over the crisis in manpower during the war. He said that the Southern is trying to "humanize" its organization and service and that it has found women to be the greatest factor in this endeavor. For one thing, said the Southern's president, a woman can say "no" to a passenger without antagonizing him. He declared, as

an aside, that women's shoe sizes, by reliable report, have increased two sizes on the average since the start of World War II, a phenomenon which he attributed to women's increasing success in "filling men's shoes."

Deploring the fact that 56 per cent of the respondents in the most recent A. A. R. national survey of public opinion did not know of any improvements in equipment or service on the American railroads, though 71 per cent of them considered the railroads the most important agency of transport, Mr. Baird expressed the opinion that the million and one-third railroad employees are not vocal enough in stating the industry's case. Pointing out that 10 per cent of the respondents in the same survey cited "keep trains cleaner" as the step most likely to impel their greater patronage of trains, the speaker asserted that women lend themselves naturally to the housekeeping problems in railroad passenger service. "Every well-run home has a good housekeeper—every railroad should have one, preferably a woman."

Regarding cleanliness and neatness—which he considered essentials of service—Mr. Baird said: "Of course, the traveling public gets pretty messy when assembled in large groups and is apt to leave a lot of debris in its wake. But let's not excuse ourselves on that score. Let's clean up and pick up before and after people. That's our job."

Following separate panel discussion groups on the first day of the meeting, three special subject reports were tendered to the membership for full consideration. The report on "Solicitation" was presented by Ioan Beckham, passenger representative, New York Central; that on "Stewardess or Hostess Service" by Margaret Lynch, supervisor of stewardess service, Baltimore & Ohio; and that on "Train Service and New Equipment" by Virginia Hess, inspector, maintenance of equipment, Pennsylvania.

New officers elected were: President, Wanda L. Myers, assistant to general passenger traffic manager, Southern; vice-president, Helen Foreman, supervisor, women personnel, Baltimore & Ohio; vice-president, Grace V. Merrill, supervisor dining service, Union Pacific; treasurer, Norma Thompson, supervisor, courier nurse service, Atchison, Topeka & Santa Fe; and secretary, Virginia Hess, inspector, maintenance of equipment, Pennsylvania.

New "Zephyr" Between Chicago and Omaha-Lincoln

The "Nebraska Zephyr", a new Diesel-powered, streamlined train of the Chicago, Burlington & Quincy, will go into daytime service between Chicago and Omaha, Neb.-Lincoln on November 16. Albert Cotsworth, Jr., passenger traffic manager, said the new train "will mark another step in the Burlington's program to modernize and improve its principal passenger services as rapidly as possible."

The new train will leave Chicago west-bound at 12:45 p.m. and arrive in Omaha at 9:15 p.m. and in Lincoln at 10:30 p.m. On its eastbound journey, the train will leave Lincoln at 11:00 a.m. and Omaha

at 12:15 p.m. and will arrive in Chicago at 8:45 p.m. Intermediate stops for passengers will be made in Galesburg, Ill., Burlington, Iowa, Ottumwa and Creston.

The "Nebraska Zephyr" will consist of stainless steel streamlined equipment, including a cocktail-lounge car, three chair cars, a dinette coach, a full-length dining car and a parlor-observation car.

A.A.R. Board Meeting

Directors of the Association of American Railroads, at their regular monthly meeting in Washington, D. C., on October 31, were concerned mainly with the framing of recommendations for presentation at the forthcoming annual meeting of the association's member roads. The member-road meeting will be held at Chicago on November 21.

An association spokesman said that the directors also discussed the freight car supply and distribution situation, and received the usual reports from association department heads.

Trainmen's Union Maps Public Relations Program

To combat what he termed current, vicious newspaper advertising employed by the railroads, and to organize an effective public relations program, A. F. Whitney, president of the Brotherhood of Railroad Trainmen, recently held a three-day conference at Cleveland, Ohio. "It is our purpose," Mr. Whitney said, "to attack the problems confronting us from all angles, political, legislative and educational, and every member of the brotherhood and auxiliary will be enlisted in the campaign." Mr. Whitney asserted that, "since we cannot hope to match the railroads' expenditures" for newspaper advertising, the unions would use radio. A half-hour weekly program was started over an Amarillo (Tex.) station on November 1 on a test basis. The brotherhood has under consideration a weekly broadcast over a nationwide hook-up.

Mr. Whitney emphasized the desirability of using "letters to the editor" columns in presenting the brotherhoods' stand to the public. A long range public relations program, which includes cooperation with church and civic groups, fact-finding assistance to members of national and local legislatures, and participation in college and industrial relations courses, was adopted.

Among the participants in the conference was Dr. Avery Leiserson, political science department, University of Chicago, eldest son of W. M. Leiserson, a member of the arbitration board in the recent non-op wage case. Others present included Dr. Arthur Carstens, also of the University of Chicago; Dr. Dewey Anderson, B. R. T. consultant; Wesley Izzard, editor of the Amarillo (Tex.) News-Globe; and Arthur T. Van Wart, Jamaica Plain, Mass. Named to the B. R. T. public relations advisory committee were H. S. Beaver, Amarillo, Tex.; Jacob Gordon, Brooklyn, N. Y.; and R. J. Trommetter, Cleveland, Ohio. Walter J. Munro, public relations representative at Washington, D. C., was assigned to temporary pres-

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R.R.B. Operations During August

Retirement and death-benefits paid to railroad employees and to beneficiaries of railroad employees totaled \$17,658,000 during August—well over the average for the first six months of 1947, according to the current "Monthly Review" of the Railroad Retirement Board. The five millionth unemployment benefit payment made under the Railroad Unemployment Insurance Act since July, 1939, was recorded during the month.

August awards of employee annuities numbered 4,947, a drop of almost 300 from the July figure. Sixty-three per cent of these annuities were based on disability—the highest proportion for any month since the beginning of the system, the Review stated. The deaths of 225 pensioners were reported during the month, reducing the number on the rolls at the end of August to 13,195. The average monthly amount of these benefits was \$59.45. Of the death benefits awarded, 5,976 were payable on a monthly basis and 933 were lump sums.

Railroad unemployment claims receipts declined slightly during August, when workers received \$2,094,000 for unemployment in 75,343 claim periods. An estimated 40,500 railroad workers were paid benefits during August for unemployment occurring since July 1. Applications for certificate of benefit rights totaled 17,612 and claims filed during the month reached 91,576.

In the employment phase of its operations, the board reported that 4,567 workers were placed in August, or 373 less than in July. However, 617 placements of unemployment benefit claimants were made, representing 150 more than during the previous month. Sickness benefits totaling \$1,494,000 were paid to 23,200 beneficiaries for illnesses and injuries, and an additional \$56,000 was paid to 493 maternity beneficiaries.

R. I. Will Install New Chicago-Omaha "Rockets" November 23

The Chicago, Rock Island & Pacific will inaugurate a new Diesel-powered, streamlined passenger service between Chicago and Omaha, Neb., on November 23, when it places in service its two new "Corn Belt Rocket" trains. This equipment will expand the road's fleet of Diesel-powered streamliners to a total of 20.

The new streamliners will carry lightweight, stainless steel cars, including baggage, dining, full parlor, parlor-observation and reclining seat chair cars. A standard sleeping car will be used on the westbound train temporarily, it was stated. To provide service from the Tri-Cities to Chicago on the eastward journey, a full parlor car will be added at Rock Island, Ill.

The cars—all built by the Pullman-Standard Car Manufacturing Company—are equipped with deep-cushioned reclining seats, the latest developments in air-conditioning and extra-wide-vision windows. The parlor and observation cars are equipped with improved radio speakers built by the railroad's electronics department.

New stainless steel, all-room sleeping cars now on order will be allotted to the

"Corn Belt Rocket," westbound, as soon as they are received from the builders, the road announced. These cars will provide accommodations of eight duplex roomettes, six roomettes, and four double bedrooms. The sleeping cars will be operated eastbound, from Omaha to Chicago, on the "Rocky Mountain Rocket."

The schedule of the new train is as follows:

	Westbound
Lv. Chicago	8:05 p.m.
" Rock Island	11:45 p.m.
" Des Moines	3:45 a.m.
Arr. Omaha	7:30 a.m.
	Eastbound
Lv. Omaha	11:30 a.m.
" Des Moines	2:15 p.m.
" Rock Island	5:25 p.m.
Arr. Chicago	8:30 p.m.

A.S.M.E. Annual Meeting Program

An educational exhibit of equipment and materials reflecting recent engineering and scientific developments in the field of jet propulsion, gas turbines, and nuclear energy will feature the 1947 annual meeting of the American Society of Mechanical Engineers which is to be held at the Chalfonte-Haddon Hall Hotels, Atlantic City, N. J., December 1-5. The exhibit, loaned by the Armed Forces and industrial organizations, will be scattered throughout the lounge floor, parlor, gallery, and solarium of the headquarters hotels.

Sessions sponsored by the professional divisions and technical committees of the society are expected to total about 74. The tentative program for the Railroad Division sessions follows:

Tuesday, December 2

9:30 a.m.

METALS ENGINEERING (I) — RAILROAD (I) Aspices of Metals Engineering and Railroad Divisions

Construction and Maintenance of Railroad Equipment by Submerged and Gas-Shielded Electric Welding, by Norman G. Schreiner, manager, Unionmelt service and development, Linde Air Products Company.

Notes on the Design and Construction of Stay-bolted Locomotive Fireboxes, by Fred P. Huston, charge railroad development, Development and Research Department, International Nickel Company.

Wednesday, December 3

9:30 a.m.

RAILROAD (II)

Aspices of Railroad Division

Presentation of Report on Railway Mechanical Engineering, by T. F. Perkinson, manager, Railroad Rolling Stock Division, General Electric Company.

Forum—Locomotive Developments

Better Locomotive Servicing Facilities on the Norfolk & Western, by C. E. Pond, assistant to superintendent motive power, Norfolk & Western. Some Important Considerations in the Design of Coal-Burning Steam Turbine Locomotives, by John S. Newton, assistant manager engineering, Steam Division, Westinghouse Electric Corporation.

Streamlining Effect on Air Resistance and Smoke Lifting on Steam Locomotives, J. F. Griffin, chief engineer, Superheater Company.

The Effect of Foundation Brake Equipment on Emergency Stop Distances, by C. D. Stewart, vice-president, Westinghouse Air Brake Company.

The South African Railways from a Mechanical Engineer's Aspect, by M. M. Loubser, chief mechanical engineer, South African Railways.

Paper by John I. Yellott, director of research, Locomotive Development Committee.

Paper by Walter Giger, Steam Turbine Department, Allis-Chalmers Manufacturing Company.

The Turbine Locomotive and Transmission Systems, by Rupen Eksbergian, vice-president, research, Budd Company.

Pennsylvania 2,000-hp. Streamline Diesel Road Locomotive, by J. C. MacInnes, supervisor, Application Engineering Department, Diesel Products, Baldwin Locomotive Works.

2:30 p.m.

RAILROAD (III)

Continuation of Forum—Locomotive Developments

Thursday, December 4

9:30 a.m.

RAILROAD (IV)

Forum—Freight-Car Construction

Paper by J. D. Loftis, chief motive power and equipment, Atlantic Coast Line.

Economics of Application of High-Strength Steel in Freight Cars, by A. F. Stuebing, assistant to manager of sales, High Strength Steel Division, Carnegie-Illinois Steel Corporation.

Paper by S. M. Felton, president, American Railway Car Institute.

Weight Reduction—Freight Cars, by Robert B. Borucki, chief engineer, Railway Division, and E. A. Sipp, manager, Reynolds Metal Company.

Weight Reduction—Freight Cars, The A. A. R. Standard Air Brake AB Single Capacity Freight Brake Equipment, by H. N. Sudduth, director of air brake engineering, New York Air Brake Company.

Development and Trend in the Design of Hopper Discharge Type of Railway Cars, by George A. Suckfield, construction engineer, Pressed Steel Car Company.

Freight-Car Construction, by G. B. Hauser, assistant chief engineer, Railroad Division, Aluminum Company of America.

Paper by M. S. Downes, assistant general manager, Railway Division, Timken Roller Bearing Company.

Freight Car Truck Progress, by R. B. Cottrell, chief mechanical engineer, American Steel Foundries.

2 p.m.

RAILROAD (V)

Continuation of Freight-Car Construction Forum

N. Y. C. Program to Reduce L. C. L. Loss and Damage

A freight station training program designed to eliminate the causes of loss and damage to less-than-carload freight shipments has been initiated at New York and other points on the New York Central system. Under the program, a service committee, whose members represent the various jobs performed in each freight-house, will assist agents at the freight-houses in bringing the training to all freight employees. The committee was trained in a course developed in cooperation with the New York State Department of Education which conducted a series of classes during which the causes of loss, delay and damage were examined and remedies for their elimination were suggested.

As a result of this program, which has received the support of freight station employees, considerable improvement in the handling of l. c. l. shipments has been noted at all freight stations on the system where the program has been instituted, according to N. Y. C. spokesmen.

Passenger Car Situation Will Grow Worse—R. R. Young

The domestic passenger car situation will become progressively worse over the next three years, with scrapped cars outnumbering those newly built, Robert R. Young, chairman of the Chesapeake & Ohio and the Federation for Railway Progress, predicted on October 29 during a press conference held in Cleveland, Ohio. Since V-J Day, he said, only about 48,000 tons of steel have been made available for the construction of railroad passenger cars, while during the same period the builders of highway transportation equipment received approximately 10,000,000 tons. This situation prevailed, Mr. Young continued, because the bankers who "control" the railroads are

interested in making profits out of the automobile companies.

At the end of its first six months of operation, the F. R. P. had secured 14,730 members, he said. This included 6,939 from the traveling public, 7,591 from railroad investors, 82 shippers, 18 brokers, 37 bankers, 59 suppliers and 3 railroads. A jump in membership occurred recently when 20,000 members of the C. & O. Employees' Mutual Benefit Association joined the federation, bringing the current total membership to about 35,000. Railroad membership recently has been increased, it was noted, by the affiliation of the Wheeling & Lake Erie.

Burlington Bids \$1,548,000 for Wartime Troop Sleepers

The Chicago, Burlington & Quincy has offered to purchase 1,290 wartime troop sleepers from the War Assets Administration at a price of \$1,200 for each car, Ralph Budd, Burlington president, announced on November 3. Mr. Budd said the railroad, if allowed to acquire the equipment, would adapt the cars to haul bulk grain, sugar and other commodities, thus helping to relieve the current box car shortage. Work on the cars would be completed in the road's shops and would require a minimum of sheet steel and other critical materials, it was stated. Each car has a capacity of 100,000 lb. and would hold more than 1,600 bushels of wheat. Other bids have been submitted for relatively small lots of these cars, both by other railroads and by other parties, it is understood.

Turn-Around-Time of Freight Cars Now Shortest on Record

October's figure of 12½ days for the average turn-around-time of freight cars

was the lowest on record, William T. Faricy, president of the Association of American Railroads, pointed out in a November 4 statement. He noted that the record was one-half day better than the best previous one (13 days) made during the peak loading in October, 1946; and a full day better than the October, 1941, turn-around time.

Mr. Faricy calculated that the half-day reduction since October, 1946, is equivalent to adding 80,000 freight cars to the available supply. "This accomplishment, which helps to relieve the present freight car situation," he added, "is the result of the combined efforts of the railroads and the shippers. It has been made possible by the improved handling of cars by the railroads and the more prompt loading and unloading of cars by shippers and receivers of freight."

Additional Railroad Units "Enlist" in Army Affiliation Program

Several additional railroads have agreed to sponsor units under the War Department's Organized Reserve Corps Affiliation Plan, it has been announced. As reported in *Railway Age* of August 16, page 70, and previous issues, the railroads were the first transportation agency to "enlist" in the corps.

New units for which agreements have been reached and their locations are as follows: New York, New Haven & Hartford: 729th Railway Operating Battalion and 749th Railway Operating Battalion, New Haven, Conn.; Chicago, Burlington & Quincy: 745th Transportation R. O. B., Chicago, Ill.; Boston & Maine: 752nd T. R. O. B., Boston, Mass.; Great Northern: 704th Transportation Railway Grand Division, St. Paul, Minn.; Missouri-Kansas-Texas: 746th T. R. O. B., St. Louis, Mo.; and Union Pacific: Headquarters and Headquarters Company, 702nd Transporta-

tion Railway Grand Division, Omaha, Neb. An ordnance depot company also is being sponsored by the Railway Express Agency, in Boston.

Freight Car Loadings

Revenue carloadings for the week ended November 1 totaled 940,746 cars, the Association of American Railroads announced on November 6. This was a decrease of 13,881 cars, or 1.5 per cent, under the previous week, an increase of 18,434 cars, or 2.0 per cent, over the corresponding week last year and an increase of 88,784 cars, or 10.4 per cent, above the comparable 1945 week.

Loadings of revenue freight for the week ended October 25 totaled 954,627 cars, and the summary for that week as compiled by the Car Service Division, A. A. R., follows:

Revenue Freight Car Loading			
For the Week Ended Saturday, October 25			
District	1947	1946	1945
Eastern	170,412	175,144	150,711
Allegheny	196,895	192,934	174,686
Pocahontas	74,561	71,302	61,239
Southern	142,344	140,476	128,441
Northwestern	144,094	147,548	134,177
Central Western	153,696	149,478	141,882
Southwestern	72,625	65,375	63,697
Total Western Districts	370,415	362,401	339,756
Total All Roads	954,627	942,257	854,779
Commodities:			
Grain and grain products	55,562	52,409	57,486
Livestock	22,172	30,808	28,005
Coal	190,678	189,782	182,805
Coke	15,306	14,235	8,611
Forest products	48,317	47,823	34,542
Ore	66,489	62,725	58,611
Merchandise l.c.l.	124,178	131,219	116,538
Miscellaneous	431,925	413,256	368,095
October 25 ..	954,627	942,257	854,779
October 18 ..	954,249	931,766	773,807
October 11 ..	956,862	899,443	754,539
October 4 ..	942,533	907,168	768,040
September 27 ..	937,954	916,515	832,580
Cumulative total, 43 weeks	36,914,861	34,099,006	35,165,280

IN CANADA.—Carloadings for the week ended October 25 totaled 88,889 cars as compared with 78,317 cars for the previous week and 86,198 cars for the corresponding week last year according to the compilation of the Dominion Bureau of Statistics.

	Revenue Cars Loaded	Total Cars Rec'd from Connections
Totals for Canada:		
October 25, 1947 ..	88,889	41,787
October 26, 1946 ..	86,198	37,836
Cumulative totals for Canada:		
October 25, 1947 ..	3,224,590	1,579,464
October 26, 1946 ..	3,002,146	1,473,716

Pullman-Standard Engineers Win Arc Welding Awards

Eight welding engineers of the Pullman-Standard Car Manufacturing Company shared in the 467 prizes awarded last week in the \$200,000 "Design-for-Progress" program of the James F. Lincoln Arc Welding Foundation. In a division of the program pertaining to railroad cars and parts, Pullman-Standard representatives placed first, second and fourth. The winning paper in this division covered the development of the company's all-welded P-S-1 "packaged" box car.



Pullman's New Board

The new board of directors of the new Pullman Company, under the federal court order which authorized sale of the company to the railroads, contains no officer or director of any railroad company that offers sleeping car service. Other than two officers of Pullman and one director who is a retired railroad officer, none of the directors has any past or present active railroad association. The board, for the most part, is composed of representative business men: (Seated left to right) J. J. Rowe, president, Fifth Third Union Trust Company, Cincinnati, Ohio; Wilfred Sykes, president, Inland Steel Company, Chicago; E. M. Durham, Jr., retired, Clayton, Mo.; M. A. Morrissey, chairman, American News Company, New York; B. S. Harvey, Jr., president, Fred Harvey, Chicago; J. W. Shands, president, Atlantic National Bank, Jacksonville, Fla.; C. R. Harding, president, Pullman Company, Chicago. (Standing left to right) C. F. Codere, president, St. Paul Fire & Marine Insurance Co., St. Paul, Minn.; G. H. Love, president, Pittsburgh Consolidation Coal Company, Pittsburgh, Pa.; J. McF. Barr, president, First National Bank, Louisville, Ky.; C. H. Westbrook, vice-president and comptroller, Pullman Company, Chicago; J. M. Harding, investments, Omaha, Neb.; Ralph Nicholson, publisher, New Orleans Item, New Orleans, La.; G. A. Eastwood, chairman, Armour & Co., Chicago; and J. A. Stevenson, president, Penn Mutual Life Insurance Company, Philadelphia, Pa.

With the Government Agencies

Harriman Says Rail Controls Should Stay

Recommends continuing Presidential powers under which O.D.T. operates

Continuation of President Truman's authority to allocate "the use of transportation equipment and facilities by rail carriers" is recommended by Secretary of Commerce Harriman in his first quarterly report under the Second Decontrol Act of 1947. That act, which requires quarterly reports from the Secretary of Commerce, went in effect until February 29, 1948, certain remnants of the wartime economic controls, including the rail-equipment-allocation powers delegated by the President to the Office of Defense Transportation.

Mr. Harriman led into his recommendation for continuance of such powers with this statement: "With the shortage of rail freight cars already acute and the prospect for further increased demand during the next few months there is a greater need now for controls over the use of transportation equipment and facilities by rail carriers than there was at the time (last July) of the enactment of the Second Decontrol Act of 1947."

Four Orders in Effect—Mr. Harriman explained that the transport controls are administered by O. D. T., "subject to overall review by the Secretary of Commerce." No general or special orders were issued by O. D. T. during the quarter covered by the report, which noted, however, that four such orders remain outstanding. They are General Order ODT 1, which prescribes loading requirements for 1. c. 1. freight; General Order ODT 18A, the carload minimum-loading order; General Order ODT 16-C, which imposes restrictions on shipments of export freight moving to port areas; and Special Allocation Order ODT R-1, requiring designated tank-car owners to lease to certain chemical companies tank cars to be converted and made available to the War Department for the transportation of ammonium nitrate solution in connection with the Army's fertilizer program.

While it has thus refrained from issuing additional orders itself, the O. D. T., Mr. Harriman continued, has requested the Interstate Commerce Commission to issue a number of service orders establishing controls over the movement of freight cars; it has "supervised the performance of the Car Service Division of the Association of American Railroads in policing car orders allocating cars into territories where they are most needed"; and it has "directed" the A. R. to place temporary embargoes on certain movements.

As to car-production, the report said that O. D. T. has "coordinated the program for new car construction" through which "it is hoped that a minimum monthly production of 10,000 cars may soon be reached and that sufficient materials may be made available to permit the prompt repair of bad-order cars." Success of this program "will depend largely upon the quantities of steel made available and the integration of the efforts of the various committees," Mr. Harriman also said.

He went on the present statistics indicating freight car installations and retirements and the high level of railroad traffic. In the latter connection he referred to the record hung up during the October 4 week, when loadings were the highest in 17 years, despite the drop in the number of freight cars in service. "The loading regulations of the Office of Defense Transportation undoubtedly played an important role in this achievement," Mr. Harriman added.

He conceded that "there have been some delays in the movement of essential freight because of a lack of freight cars," but emphasized that there has been "no breakdown" in railroad transportation service. "Nevertheless," he added, "with carloadings at peak figures it is apparent that serious difficulties can be avoided only by continuation of conservation measures and a high rate of efficiency in railroad operations. In view of the declining number of freight cars, the extremely high level of business activity in the United States at the present time could of itself be expected to impose a strain on the nation's railway transportation plant. Superimposed on the domestic demand are the rail transport requirements of the large volume of export shipments, particularly of grain and coal."

Frees One Government Rate Complaint from Grouping

The Interstate Commerce Commission has removed one of the Department of Justice's rate complaints from the joint-hearing setup wherein it had been grouped with four others. At the same time the commission has set back from December 15 until January 20, 1948, the date for the opening of the joint hearing on the four remaining complaints at Washington, D. C.

The complaints are among several which the Justice Department has been filing to assail various rates and charges paid by the government on shipments of war materials during World War II. The department filed a petition in opposition to the grouping of the complaints for hearing, and the commission's present action is in response to that petition. It severs the "amended complaint" in Docket No. 29572 which assails rates paid by the government on its wartime shipments of crated automobiles. The four complaints remaining for consideration at the postponed joint hearing are Nos. 29735, 29746, 29795, and 29805.

Would Allocate Steel to Domestic Users

President's advisers propose controls to soften impact of foreign aid

Allocations for domestic use of steel and other commodities, where "relative shortages" now exist, and the promotion of "efficient transportation and distribution" are among measures for "softening the impact" of the country's prospective foreign-aid program, which have been recommended by President Truman's Council of Economic Advisers. The recommendations were contained in a report, made public this week, which reaches the general conclusion that the nation's economy can sustain and finance the prospective relief program.

The study of the council, which is headed by Edwin G. Nourse, is the second of three dealing with the foreign-aid problem. As indicated above, it covers "The Impact of Foreign Aid Upon the Domestic Economy"; and it ties in with the report on "National Resources and Foreign Aid," which was submitted to the President recently by Secretary of Interior Krug (see *Railway Age* of October 25, page 56). The third report, being prepared by a committee headed by Secretary of Commerce Harriman, will deal with the character and quantities of goods which may be utilized for foreign relief.

High Domestic Demand—Unlike the Krug report, the present study contains no section devoted to transportation, its references to that matter being in connection with its discussion of shortages of commodities, such as steel. The council's "general conclusion" regarding the latter was that "whether the domestic situation worsens considerably or progresses satisfactorily depends upon the use of vigorous, affirmative measures to assume distribution to the most urgent uses and to prevent a spiraling of prices."

Previously the report had stated that the domestic demand for steel "is expected to continue strong if the general economy remains at high levels of operation." Among other evidences of the demand, the council found that "makers of essential railroad and industrial equipment, as well as automobiles, are operating below their capacity because they cannot get steel." Moreover, it saw "little prospect" that the supply of steel can be increased in the near future in amounts "even approximating increasing domestic and foreign needs."

From the presentation as to Europe's needs which was made recently by the Committee of European Economic Cooperation, the council calculated that the foreign-aid program's "maximum" annual demand for

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steel ingot (or ingot equivalent) would be 4 per cent of current American production, as compared to the recent level of exports at 2.8 per cent. With respect to scrap, however, the report said that the domestic shortage "is so serious that sending scrap abroad, as requested by the Paris conference, is illogical."

A tabulation showed that freight cars were exported during the first half of this year at a rate (dollar basis) which, if continued, would give foreign countries 41 per cent of the year's output. A footnote explained that this "high percentage" resulted "primarily from an accumulation of deliveries against orders placed by France many months ago for the replacement of cars lost during the war." It added that deliveries on these French orders accounted for 89 per cent of the cars exported during this year's first half.

Meanwhile, the table also showed that cars representing 19.5 per cent of the dollar value of the total 1946 domestic production were exported. Except for motor trucks (19.7 per cent) this was the highest 1946 percentage shown for any of the 13 "selected non-agricultural commodities" covered by the tabulation.

Europe's Needs—The domestic coal problem, as the report put it, "is not, in the main, one of the capacity to mine the coal but of ability to transport it to the points of use." Thus, "additional coal-carrying capacity is needed in this country as well as in Europe"; and "hence the export of rolling stock becomes a factor in our coal problem."

Included in the Committee of European Economic Cooperation's presentation, which was referred to by the council, as noted above, were the so-called technical reports from prospective participants in the aid program—12 European countries (including Great Britain) and those parts of Germany outside the Russian zone. These technical reports, recently made public by the State Department, show that these prospective participants will require a total of 724,000 new freight cars during the four-year period from 1948 to 1951, inclusive. Their estimated productive capacity is 621,000 cars, thus leaving 103,000 to be imported if the "full deficit" is made up. Meanwhile the productive-capacity estimate assumes that "there will be full availability of materials."

On a like basis the "full deficit" in passenger-car requirements, which "can only be met by importation," is put at 2,600 cars. Here, however, the committee suggested that meeting the "full deficit" "is not vital to the economy" of the participating countries. It added that "the requirements for passenger cars do not justify the use of shipping space and the expenditure of dollars on more than 1,300 cars during this period in view of other more vital demands for shipping space and dollars."

The locomotive position of the participating countries was shown as one embodying capacity for the production of 11,965 engines during the four-year period. This, which, of course, assumes availability of materials, would leave a balance of 2,587 above estimated requirements totaling 9,378 locomotives as the 1947 output of the locomotive plants has been below capacity "owing to shortages of materials."

Other requirements listed in the report, also on the basis of totals for the four-year period, include materials for 6.84 million metric tons of rails and steel ties; and timber for 51.2 million wood ties.

By Taking Restrictions, Frisco Gets Missouri Truck Routes

Because it became willing to have the acquired routes restricted to services which are auxiliary to railroad operations, the Frisco Transportation Company, subsidiary of the St. Louis-San Francisco, has finally been authorized by the Interstate Commerce Commission to acquire the Righter Trucking Company's rights on five routes between points in Missouri. The commission's approval came in a report on reconsideration in No. MC-F-2413, the dissents of Commissioners Lee, Patterson, and Barnard being noted, while Commissioner Rogers did not participate.

The prior report, a 6-to-4 decision noted in the *Railway Age* of August 10, 1946, page 239, denied the application because the Frisco had said that it would not consummate the transaction if the trucking operations on the acquired routes were to be restricted to make them auxiliary to train services of its parent railroad.

The reopening out of which the present report has come was upon petition of the Frisco which had meanwhile decided that it would be advantageous for it to acquire the Righter routes even if its future operations on them were to be restricted. For some time it has been operating the routes on an unrestricted basis under lease and pursuant to temporary authority granted by the commission.

During the reconsideration phase of the case, Frisco modified somewhat its original application and further modifications were made by the commission to eliminate duplicate operating authorities and situations wherein irregular-route and regular-route rights would be combined for the purpose of rendering through services. The net result was commission approval subject to the usual auxiliary-to-rail-service conditions, of acquisition by Frisco of Righter's regular-route rights between the following Missouri points: Cape Girardeau and Blytheville; Sikeston and Poplar Bluff; Jackson and Arbyrd; and between the junction of U. S. highways 61 and 62 and Campbell.

1946 Salaries Over \$10,000 Took 0.68 Per Cent of Payroll

Officers receiving salaries of \$10,000 or more in 1946 took 0.68 per cent of that year's aggregate payroll of Class I line-haul railroads and Class I switching and terminal companies, including 22 carriers in those classes which reported no salaries of \$10,000 or more. This compares with a 1945 figure of 0.62 per cent.

The 1946 salary data, derived from returns made by the carriers in their annual reports under Schedule 562, have been summarized in the usual way by the Bureau of Transport Economics and Statistics of the Interstate Commerce Commission, the summary being No. 4727 of the bureau. It shows that 1,683 officers received salaries of \$10,000 or more in 1946, as compared

with 1,428 in 1945, the aggregate amount paid to them having been \$29,422,732, as compared with \$24,696,595.

The average 1946 compensation of the \$10,000-and-over salary group was \$17,422, the highest average since the 1942 figure of \$17,316. The group consisted of 0.12 per cent of all employees in 1946, as compared with 0.098 per cent in 1945.

Thirty-two 1946 salaries were in the \$60,000-and-over bracket, as compared with 26 in 1945. The aggregate 1946 compensation of these top executives was \$2,339,627, or 7.95 per cent of the total paid to the whole \$10,000-and-over group. Salaries of \$20,000 or more, or more than half of the group, fell in the \$10,000-to-\$14,499 class, while 26 officers received 1946 salaries of \$25,000 or more, as compared with 215 in 1945 and 194 in 1944.

In addition to the information on annual salaries of \$10,000 or more, the statement, like its predecessors, contains a table which summarizes data on salaries paid by Class I line-haul roads to executives, officials and staff assistants assigned to Division I and Division 2 in the commission's wage statistics. Employees thus assigned in 1946 totaled 15,025, including 6,754 executives, general officers and assistants, whose average 1946 salary was \$8,688, as compared with \$7,991 in 1945; and 8,271 division officers, assistants and staff assistants, whose average 1946 salary was \$5,566, as compared with \$4,925 in 1945. These salary averages compare with 1929 averages of \$7,508 and \$4,166, respectively.

Rail-Water Cases Reopened

Limited reopenings have been ordered by the Interstate Commerce Commission in the No. 27969 proceeding which involves divisions of joint rail-water rates between Atlantic seaboard territory and southwestern territory, and in No. 13535, Consolidated Southwestern Cases, and No. 28023 insofar as they involve maximum rate orders of rail-and-ocean rates. With the reopening order in No. 27969 came a report on reconsideration wherein the commission considered disagreements between rail and water carriers as to the correct interpretation of certain findings in the original report.

One such disagreement concerned the rail-mileage factor of the divisions formula, and the commission ruled in favor of the railroads' contention that their mileage factor should conform strictly to the formula prescribed by the commission in the Eastern Class Rate Investigation, i.e., a constructive distance of 10 miles should be added to the short-line distances to and from the rail termini specified in the report.

The other disagreement arose over the original report's rule which stipulates that where the interchange of l.c.l. between a railroad and a water line is made by motor truck, the cost of such transfer "shall be deducted before prorating on the prescribed divisions." When they introduced truck transfer of l.c.l. at Galveston, Tex., and Houston sometime ago, the railroads interpreted this rule as authority for deducting the cost of such transfer from the joint rates before prorating.

Only one water line was affected by this, and that line was not one of the original complainants in the proceeding, but the

commission was nevertheless asked to rule on the dispute. The water line contended that the rule was framed with the New York situation in mind, truck-transfer arrangements for l.c.l. having been confined largely to that port when the original report was made.

While the commission did not agree that the rule was written for such narrow application, it nevertheless observed that the prior report "certainly did not intend to approve a rule which would enable the rail lines to substitute truck service for what had previously been a rail service and thereby secure a larger division at the expense of the water lines."

At the same time, the commission found the record before it inadequate for a determination of what modification should be made in the rule. Thus the reopening of the proceeding for that purpose and for the purpose of determining what modifications, if any, should be made in the prescribed division arrangements because of changes in rates that may be brought about as a result of the reopenings in Nos. 13535 and 28023. The latter was reopened after the water lines had filed a petition asking that the commission's maximum rate orders therein be set aside in so far as they relate to rail-water rates; and the reopening is limited to that question.

Files Anti-Trust Complaint Against Investment Bankers

Violation of the anti-trust laws by the Investment Bankers Association and 17 investment banking firms is charged in a civil suit filed by the Department of Justice on October 30 in the United States District Court for the Southern District of New York. The filing was announced in a statement issued in Washington, D. C., by Attorney General Clark, who said that the complaint alleged that the defendants "have conspired to restrain unreasonably and to monopolize the securities business of this country by restricting, controlling and fixing the channels and methods, and prices, terms, and conditions upon which security issues are merchandized."

Named as defendants, in addition to the association, are: Morgan Stanley & Co.; Kuhn Loeb & Co.; Eastman, Dillon & Co.; Kidder, Peabody & Co.; Goldman, Sachs & Co.; Lehman Brothers; Smith, Barney & Co.; Glore, Forgan & Co.; White Weld & Co.; Drexel & Co.; the First Boston Corporation; Dillon, Read & Co.; Blyth & Co.; Harriman Ripley & Co.; Stone & Webster Securities Corp.; Harris, Hall & Co., and Union Securities Corporation.

All of these, Mr. Clark said, "have their principal place of business in New York City." The list includes firms which have often participated in railroad financing operations, but sales of railroad security issues generally are subject to Interstate Commerce Commission regulations requiring competitive bidding.

The relief sought by the complaint includes, among other things, a request that each defendant banking firm be enjoined from occupying "the dual function of adviser to an issuer and of purchaser for resale of the securities of the same issuer"; from "placing any officer, director, partner, agent, employee or nominee on the board of

directors of any issuer for whom it acts either as financial adviser or as a purchaser of securities"; and from "refusing to negotiate with or to compete for the purchase of securities of any issuer either because some other investment banker is or has been the traditional banker for such issuer, or because the business of such issuer might be in competition with the business of some issuer for whom one of the defendant banking firms acts as adviser or handles security issues."

Presidential Committee Would Ban "Jim Crow" Practices

Enactment by Congress of a law "prohibiting discrimination or segregation, based on race, color, creed, or national origin, in interstate transportation and all the facilities thereof, to apply against both public officers and the employees of private transportation companies" is one recommendation made in a report which President Truman has received from his "Committee on Civil Rights." The 178-page report of the committee, which President Truman appointed in December, 1946, also recommends the enactment of "a fair employment practice act prohibiting all forms of discrimination in private employment, based on race, color, creed, or national origin."

Charles E. Wilson, president of the General Electric Company, was chairman of the committee which had 14 other members, including James B. Carey, secretary-treasurer of the Congress of Industrial Organizations, Morris L. Ernst, New York attorney, Bishop Francis J. Haas of Grand Rapids, Mich., one-time chairman of the fair employment practice committee set up during the war by former president Roosevelt, Franklin D. Roosevelt, Jr., and Boris Shishkin, economist, American Federation of Labor.

Increase to 15 Cents in Red Cap Fees Sought by Railroads

Tariffs proposing a December 1 increase, from 10 to 15 cents, in the per-piece charge for handling passengers' hand baggage by station porters or "red caps" have been filed with the Interstate Commerce Commission by the New England Passenger Association, Trunk Line-Central Passenger Association and the Southern Passenger Association. The latter seeks to make the increases effective only in Washington, D. C., Cincinnati, Ohio, and Petersburg, Va. Also proposed is an increase from \$1 to \$1.50 per baggage truckload for parties with more than 10 pieces of baggage.

A like tariff with a November 1 effective date was filed earlier by the Cincinnati Union Terminal Company, but the Commission suspended it until November 30 after receiving a protest from Willard S. Townsend, president of the United Transport Service Employees of America.

I. C. C. Passes on Pullman's Ticket-Redemption Rules

Reporting on its investigation of the Pullman Company's refund tariff, which has been in effect since August 1, 1946, Division 2 of the Interstate Commerce Commission has made the general finding

that a rule requiring the redemption of tickets a reasonable length of time before the departure of the train for which they are sold is just and reasonable. As to the tariff's specific provisions, however, the division suggested "desirable" changes in some of the rules and found that the absence of rules to take care of certain additional situations is unjust and unreasonable.

One such finding is directed against "any arrangement or contract with the rail carriers that permits such carriers to reserve accommodations in Pullman cars without the purchase of a Pullman ticket, and which results in permitting any person to enjoy or receive greater or other privileges, immunities or preferences not accorded all passengers who purchase Pullman tickets."

This finding was based on evidence from which the commission drew the following deductions: "That railroad agents handling Pullman tickets do make reservations for prospective passengers without requiring them to purchase Pullman tickets; that some of the rail carriers require that a ticket be purchased within a limited time after the reservation is made or the agent releases the space, but that others do not do so; that respondent does not know the extent to which the railroads limit the time reservations will be held; that such practice results in according privileges to those so favored not afforded to the public generally; and that leaving it to the individual railroads to govern the making and holding of reservations without the purchase of Pullman tickets tends to defeat the avowed purpose of the tariff."

Pullman's Views—On this matter the report rejected Pullman's contention that it "has no authority over, or power to control, reservations of space in Pullman cars made by railroads." It was conceded that Pullman may make or refuse to make reservations without the purchase of tickets, but "all passengers must be treated alike." Pullman's duty to do that extends to the disposition of reservations, and the Interstate Commerce Act's purpose to eliminate discrimination and favoritism "cannot be defeated by the Pullman Company by delegating its duties to the rail carriers by contract or otherwise," the report added.

Meanwhile it had taken up and passed upon the various provisions of the tariff, dealing first with the rule which states that sleeping or parlor car tickets must not be sold except in connection with railroad transportation good on the train for which the sleeping or parlor car ticket is issued, and for not less than the complete journey for which the sleeping or parlor car accommodations are desired. This rule was carried over from the previous redemption tariff which was in effect from May 20, 1942, until August 1, 1946; and the division passed on with a brief statement that there seemed "no question" as to its "reasonableness and lawfulness."

Turning then to the rule which provides that tickets will not be redeemed by ticket agents unless the space covered was released and replaced on sale "and the number under which reserved erased from the diagram," the commission concluded that no finding was necessary, Pullman having conceded that the provision should be removed from the tariff "if it creates uncer-

tainty." Pullman explained at the hearing that the provision is a counterpart of other rules in the tariff and is thus unnecessary; it is intended to mean that a ticket agent will not redeem a ticket that was sold at another office or in another city when he has no knowledge that the reservation was released within the time limit. As it now stands, the commission said, the rule "seems to charge the purchaser with the responsibility of seeing that the railroad agents put units of space, for which tickets are canceled, on resale and make the necessary corrections on the diagram, which admittedly was not its purpose."

Ticket Redemption—As for the period within which sleeping-car tickets may be redeemed, the tariff's general rule is that they must be presented not later than the day in advance of departure of trains for which they were sold. Tickets sold for a car placed for occupancy before midnight, but scheduled to depart at or after midnight, are considered as having been sold for a car departing on the day the car was placed for occupancy. Treating the day as beginning immediately after midnight, the commission noted that the length of time tickets must be released before the departure of the train "would increase as the time of departure approaches midnight," and there would be variations "ranging from a few minutes to nearly 24 hours."

In order to eliminate the "probability of misinterpretation" and to remove "all color of preference and discrimination," the commission suggested that it would be "desirable" to amend the rule to provide that presentations of tickets for redemption must occur the day in advance but "at least 6 hours" before departures of the trains involved. It made no finding requiring such amendment, because there had been no complaint against the present form of the rule, nor evidence showing that it has been unduly preferential or prejudicial, or unjustly discriminatory.

The tariff's general rule for redemption of tickets for seats in parlor cars provides that they may be turned in for refund at any time before departure of the train. The division made no comment on this beyond noting that it involved no change from the previous tariff which had the same rule also for redemption of tickets for space in sleeping cars. Likewise did the report make only brief reference to those provisions of the tariff which permit release of space by telephone, and provide for the exchange, at any time in advance of departure, of space for different accommodations with adjustment of fares. In the latter connection Pullman has proposed an amendment to permit the exchange to be made not only for accommodations on the same train but also on other trains departing the same day. The commission found that the rule, together with the amendment, is not unlawful.

Resale Provisions — Another rule of the present tariff provides that where space is released after the deadline, but before departure of the train, the released space will be placed on sale and the late canceler advised that he may apply to Pullman's general passenger agent for a refund; and that such refund will be made if the ticket is resold. Pullman has suggested two

amendments to this rule to provide (1) that ticket agents as well as the general passenger agents may make refunds in such cases, provided they can verify the fact that the space was resold; and (2) that refunds will be made if accommodations similar to those cancelled after the deadline are available and had been continuously available on and since the preceding day. The commission said these amendments were "desirable," but went on to require another providing that "where the necessary information is or should be available to the agent at the offices where the tickets are canceled, the canceled tickets are to be resold in the order in which they were presented or a refund is to be made for tickets skipped or passed over in making resales." On that basis the rule is approved as just and reasonable.

With respect to tickets resold after departure of the train, the tariff provides for refunds on the basis of the rate from the point of resale; and that if the space covered by the ticket is used to transfer a passenger from another space, refund will be made in the amount of the difference in the costs of the two units, except where the space from which the passenger is transferred also is sold, in which event the fare from the point where that space is resold will be added to the refund. Pullman has proposed to amend this to provide that refund for the entire rate or value of the space from the point of resale will be made when accommodations for which a ticket is canceled are used for the transfer of a passenger from another unit of space. Here again the commission said there should be provision for resale in the order of cancellations, and refund if such order is not followed.

With further reference to space canceled after departure of trains, the tariff provides that conductors will be notified of such releases by telegraph and refunds made on the basis of resales, if any. A similar rule, the commission said, should provide for release of canceled space to agents at stations on the route of the train.

Accounting Orders

Division 1 of the Interstate Commerce Commission has issued an order which will modify the Uniform System of Accounts for Steam Railroads by changing the title and text of the present operating-expense account 457, Pensions. The order becomes effective January 1 when the account will be designated "Pensions and Gratuities," and the revised text will authorize railroads to adopt the accrual method of accounting for benefits if they have established retirement plans whereby they definitely agree to pay pensions to retired employees.

In another recent order, also effective January 1, Division 1 made several technical and clarifying modifications of the interpretations embodied in the commission's Accounting Bulletin No. 15.

Commission Resumes Hearings on Two Per Diem Complaints

Discussions of cost factors to be considered in arriving at a fair and adequate per diem rate highlighted this week's sessions of hearings on two per diem complaints

before the Interstate Commerce Commission in Washington, D. C. Examiner Claude Rice is presiding. Previous hearings were held in June, as reported in *Railway Age* of June 21, page 1275.

One complaint, filed by the short lines, assails the per diem rates which have been in effect since February 1, 1945, and asks the commission to cut the rate to 95 cents, or to other such basis as it may determine, and to award reparations. The other complaint was filed by six western roads—the Atchison, Topeka & Santa Fe, Illinois Central, Chicago, Burlington & Quincy, Northern Pacific, Great Northern and Denver & Rio Grande Western—which allege that the former \$1.25 rate, since increased by the commission to \$2 for a six-month period, effective October 1, was too low and therefore a contributing factor to the freight car shortage. The complaints are docketed as Nos. 29587 and 29751, respectively.

Complainants' Views—As this issue went to press, the short lines had presented only one witness, J. P. Nye, former secretary-treasurer of the American Short Line Railroad Association. Appearing in the absence of J. M. Hood, president of the association, Mr. Nye introduced an exhibit showing that, of the 1,746,721 freight cars owned by Class I roads as of January 1, 24.96 per cent were 21 to 25 years old; 21.13 per cent were over 30 years old; 14.10 per cent were 16 to 20 years old; 13.75 per cent were 6 to 10 years old; 11.55 per cent were one to five years old; 10.25 per cent were 26 to 30 years old; and 4.26 per cent were 11 to 15 years old. Mr. Nye also offered an exhibit showing that expenditures for freight car repairs in 1946 totaled \$373,978,741, the highest since 1926, when \$377,702,544 was expended.

Following Mr. Nye's brief presentation, several witnesses for the six complaining western roads testified to the effect that inadequate per diem was responsible for many of their own cars being retained on foreign lines and thereby resulting in their being unable to meet shippers' demands and, in turn, losing the revenue which the use of such cars would produce. These witnesses included J. F. McDonald, assistant general auditor, Santa Fe; J. F. Blair, assistant general auditor, C. B. & Q.; K. H. Lyrla, auditor of disbursements, I. C.; F. J. Dodds, former supervisor of freight and passenger car shops, Santa Fe; J. J. Mahoney, general superintendent, transportation, Santa Fe; C. J. Fitzpatrick, general superintendent, I. C.; G. A. Hoffelder, assistant general freight traffic manager, C. B. & Q.; and F. E. Sperry, general superintendent, transportation, C. B. & Q.

Mr. McDonald, principal witness for the western complainants, offered several exhibits, among them being one showing that the approximate net earnings per freight car day for the six western roads was \$3.31 per car. This exhibit, based on the 1946 experience of the six roads, also showed that the freight revenue earned per freight car-day totaled \$9.27, while out-of-pocket costs of handling the traffic amounted to approximately \$4.64 per day and federal income taxes, \$1.32.

Another McDonald exhibit presented figures designed to show that the cost of

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owning a freight car (other than refriger-
ator cars) in 1946 was \$2.04 per day. To
this figure, Mr. McDonald added 19 cents
(making a total of \$2.23) as an adjustment
of the 1946 costs to wage levels and ma-
terials prices as of September 1, 1947. At
the earlier hearings, the short lines, pres-
entation included studies which put the
ownership cost of a box car at 95 cents
per day.

At the same time, the witness told the
commission that while all Class I roads
in 1946 had 110.8 per cent cars on line of
cars owned, comparable figures for the
New York, New Haven & Hartford and
Boston & Maine were 293.1 per cent and
216.2 per cent, respectively. The B. & M.,
according to Mr. McDonald, owns 6,382
cars, but had an average of 13,798 on line
during 1946, while the New Haven, with
an ownership of 7,196, had an average of
21,092 on line during the same year.

West Wants Cars—Among the other
witnesses Mr. Sperry asserted that the com-
plainants either want their cars returned
or receive "full compensation" for their
use by other roads in order that they be
reimbursed for their losses in revenue. He
added that the Burlington, in order to meet
shippers' requirements, is using gondola
cars in lieu of hoppers principally because
its supply of hoppers can be used at a
profit by foreign lines at the present per
diem rate.

According to Mr. Mahoney, the per diem
charge should have been increased "con-
siderably more" than 15 cents between No-
vember, 1920, and February, 1945, and
"should have advanced progressively at a
faster rate" between the latter date and
October 1 of this year. The increases were
needed, he contended, in order to reflect
rising costs and the level of the country's
car supply.

The proceeding, meanwhile, was marked
by frequent clashes between opposing coun-
sel as to what factors should enter cost
studies used to determine what the per
diem rate shall be. Among the suggestions
advanced was that of A. C. Scott, assistant
general solicitor of the Burlington, who
said that per diem should be fixed on the
cost of car ownership during normal times
and on losses of earnings during emergency
car shortage periods. Such losses, he said,
often exceed \$4.50 per day.

Suspends Registrations of 42 Non-Certificated Air Lines

"Letters of registration" held by 42 non-
certificated air carriers operating "large"
aircraft were suspended by the Civil Aero-
nautics Board when the carriers failed to
meet the October 17 deadline for the filing
of tariffs covering their services and com-
plying with certain other requirements of
the Civil Aeronautics Act. As noted in the
Railway Age of October 11, page 79, the
board's suspension order was issued October
2 to become effective 15 days after that date.

Issues Rules for Transport of Radioactive Materials

Regulations for the transportation of
radioactive materials have been prescribed
by the Interstate Commerce Commission
in an October 24 order in Docket No. 3666,

the general proceeding covering regulations
for the transportation of explosives and
other dangerous articles. The regulations
become effective January 21, 1948, but
compliance with them is authorized "on
and after" the date of service of the order.

Exemption is provided for shipments of
radioactive materials," made by the Atomic
Energy Commission, or under its direction
or supervision, which are escorted by per-
sonnel specially designated by the Atomic
Energy Commission."

Car Service

I. C. C. Service Order No. 787, effective
from November 6 until April 30, 1948, un-
less otherwise modified, imposes an embargo
against M. Dunn & Co. of Detroit, Mich.,
which, as the order put it, "has persistently
and is now indulging in the practice of hold-
ing loaded refrigerator cars an unreasonable
time before unloading them." The order
also said that the railroads had placed an
embargo against the company, but "they
have disregarded that embargo." The order
authorizes service to the embargoed com-
pany under permits issued by the director of
the commission's Bureau of Service.

Overseas

More Electric Motive Power for Chilean Railroads

Chilean State Railways has recently
placed an order with Electrical Export
Corporation for four express passenger
and eight switcher locomotives, as well as
additional equipment for four substations
and two switching stations. The line was
electrified in 1924, the equipment being
supplied by the Westinghouse Electric
Corporation.

Typical of the equipment in its five
substations is that at Vina del Mar, where
two motor-generator units, consisting of
two 1,000-kw. generators driven by a
2,820 hp. synchronous motor, supply 3,000-
volt d.c. current for the contact system.
These units have been in operation without
serious repair for 23 years, and a third
unit was added recently. Thirty-nine loco-
motives were purchased originally. These
consisted of fifteen type C-C freight, six
type 1-C-C-1 express passenger, eleven
local passenger, and seven switcher loco-
motives. An additional order for four
express passenger locomotives was placed
in 1934, and seven more switcher loco-
motives were purchased in 1942.

The Santiago-Valparaiso line is meeting
ever-increasing traffic demands. Heavy
machinery, clothing, shoes and cosmetics
are some of the items passing into the
country, while copper, rice, fruits, vege-
tables and wines are shipped to coastal
ports for export. From Las Vegas, one
section of the railway runs east to join
the Trans-Andean Railroad, principal land
link between Chile and Argentina.

Supply Trade

Gwilym A. Price, president of the
Westinghouse Electric Corporation has been
elected a director of the **Westinghouse
Air Brake Company** and the **Union
Switch & Signal Co.** Mr. Price fills a
vacancy on the board caused by the resigna-
tion of A. W. Robertson.

The **Allis-Chalmers Manufacturing
Company** has announced the organization
of a fifth region for the field organization
of its general machinery division, to be
designated as the Empire region and em-
bracing the territory now covered by the
New York, Buffalo, N. Y., Rochester,
Syracuse and Newark, N. J., offices. The
Rochester and Syracuse offices (formerly
branch offices under the Buffalo district
offices) and the Newark office (formerly
a branch of the New York district office)
automatically assume district office status
under the regional plan. **Arch J. Cooper**
will continue as New York district office
manager in addition to regional manager;
Vernon L. Spinney, formerly New York
petroleum sales representative, has been
appointed assistant district office manager;
William J. Devers, formerly public utili-
ties sales representative, New York district
office, has been appointed Newark district
office manager; and **N. W. Landis**, for-
merly branch manager of the Syracuse
office, has been appointed district manager.

Alvin W. Dawson has been elected
president of the **American Locker Com-
pany**, Boston, Mass., to succeed the late
Paul W. Kimball. Mr. Dawson was
formerly vice-president, treasurer and di-



Alvin W. Dawson

rector of RKO Theatres, Inc. and subsidi-
ary companies, with which companies he
has been connected for the last thirteen
years. He has served as a director of
American Locker since 1942.

Establishment of the welding equipment
divisions as one of the new integrated
operating units within the **General Elec-
tric Company's** apparatus department has
been announced by R. C. Muir, vice-presi-
dent and general manager of the depart-
ment. The management of the unit will
be directed by a welding equipment com-
mittee headed by **A. F. Vinson**, assistant

production manager of the apparatus department. Other members of the committee are **C. I. MacGuffie**, manager of sales of the electric welding section and **F. P. Wilson, Jr.**, staff assistant to the manager of engineering.

T. G. Gill, wood technologist, has joined the laboratory staff of the **Timber Engineering Company**, it has been announced.

J. C. Elmburg, manager of the Boston, Mass., branch of **Fairbanks, Morse & Co.**, has been transferred to the Atlanta, Ga., branch in the same capacity, to replace **G. N. Van Epps**, resigned. **V. O. Harkness**, formerly manager of the Diesel division at Chicago, has been appointed manager of the Boston branch to succeed Mr. Elmburg, and **T. M. Robie** succeeds Mr. Harkness.

Lee S. Coulter has been appointed manager of the industrial sales division of the **American Hoist & Derrick Co.**

The **Pioneer Engineering Works, Inc.**, Minneapolis, Minn., has announced the appointment of **Truman A. Dunn** as sales engineer for Kentucky, West Virginia, Ohio, Indiana, lower Michigan and northern Illinois, with headquarters at Bloomfield, Ind.

The appointment of the **Morman Belting & Supply Co.**, Milwaukee, Wis., as distributor for the **Parker Appliance Company**, Cleveland, Ohio, has been announced.

The **Hewitt rubber division of Hewitt-Robins, Inc.** has announced the appointment of the **Industrial Supply Company** of Minneapolis, Minn., as a distributor of their industrial hose, belting and packing. The Robins conveyors division of Hewitt-Robins has announced the appointment of the **St. Louis Railway Supply Company** as a distributor in the St. Louis, Mo., area.

Organizations

Jay Samuel Hartt, president of the Chicago South Shore & South Bend, and a consulting engineer, will address the Chicago chapter of the **Railway & Locomotive Historical Society** at 7:30 p.m. on November 14, at 205 West Wacker Drive, room 1200. The subject of his address will be "Importance of the South Shore Line in Chicago Terminal District."

The **Northwest Locomotive Association** will meet November 17 at 8 p.m., at Woodruff Hall, St. Paul, Minn. **Roy Ambrust** of the Vapor Car Heating Company will discuss the operation and maintenance of the Vapor-Clarkson steam generators.

The **Car Department Association of St. Louis** has scheduled a meeting for November 18 at 8 p.m., at the DeSoto Hotel, St. Louis, Mo. **T. J. Boring**, general foreman, Pennsylvania, will present a paper entitled "A. A. R. Interchange Rules and Car Repair Billing."

The second **National Materials Handling Conference and Exhibition** will be held at the Public Auditorium, Cleveland, Ohio, January 12-16, 1948, inclusive.

The second annual conference and exhibition of the **National Association of Corrosion Engineers** will be held at the Jefferson hotel, St. Louis, Mo., April 5-8, 1948.

Equipment and Supplies

LOCOMOTIVES

The **LEHIGH VALLEY** has ordered seven 2-unit 4,000-hp. Diesel-electric locomotives from the **American Locomotive Company** for delivery early in 1948. The locomotives will be put into passenger service between New York and Buffalo, N. Y.

The **LEHIGH & NEW ENGLAND** has ordered 11 Diesel-electric locomotives from the **American Locomotive Company** for delivery around mid-1948. The new equipment, which includes 10 1,500-hp. freight locomotives and 1 1,000-hp. switching locomotive, will be used to Dieselize completely the road's main line service between Pen Argyl, Pa., and Maybrook, N. Y., and to Dieselize partially the service west of Pen Argyl.

FREIGHT CARS

October Freight Car Output Totaled 8,364

Freight cars produced during October for domestic use totaled 8,364, including 2,122 built in company shops, compared with the September total of 7,597, including 1,929 built in company shops, the **American Railway Car Institute** has announced. Freight cars ordered last month for domestic use totaled 14,537, including 7,500 ordered from company shops, compared with September orders for 9,917, all of which were ordered from contract builders. The backlog of cars on order and undelivered on November 1 was 122,463, including 32,175 on order from company shops.

The **WABASH** has ordered a stainless steel passenger train of six cars from the **Budd Company**. No name has been selected for the new train, the consist of which will be decided later. The train will be placed in service between Chicago and St. Louis, Mo.

The **VIRGINIAN** has ordered 500 50-ton gondola cars and 500 50-ton hopper cars from its own shops.

SIGNALING

The **NORTHERN PACIFIC** has ordered an 8-lever, Model 2 electric interlocker from the **General Railway Signal Company**. The interlocker, to be installed at Rice's Point, Duluth, Minn., will control 5 signals and 3 switch machines. Model-5A electric switch

machines, Types-SA and MD signals, and Type-K relays will be used in this installation.

PASSENGER CARS

The **NEW YORK, NEW HAVEN & HARTFORD** will spend \$6,000,000 to purchase 46 new passenger cars and recondition and modernize 104 old cars if the road's applications for fare increases, pending in four states, are granted, **Harold Quinlan**, passenger traffic manager, said last week at a hearing conducted by the Public Service Commission of New York on the New Haven's application for authority to increase intrastate commutation fares in line with the increases previously authorized by the Interstate Commerce Commission.

Financial

ESCANABA & LAKE SUPERIOR.—Promissory Notes.—Division 4 of the Interstate Commerce Commission has authorized this road to issue and sell at par \$80,000 in promissory notes, the proceeds of which will be applied toward the purchase of a 660-hp. Diesel-electric switching locomotive, at a contract price of \$78,799, from the **Baldwin Locomotive Works**. The notes will be dated on or about December 1, will be payable five years after the date of issue and will bear interest at the rate of 4 per cent. According to the applicant, the notes will evidence loans from six or seven of its largest stockholders. The commission said that the road has not as yet determined which of the stockholders are to provide the funds, or in what amounts, but that the applicant has no doubt that the funds can be obtained from those sources.

HIGH POINT, THOMASVILLE & DENTON.—Promissory Notes.—Division 4 of the Interstate Commerce Commission has authorized this road to issue and to renew from time to time two unsecured promissory notes.

One note, not to exceed \$35,000, will evidence a loan of a like amount from the **Wachovia Bank & Trust Co.**, of High Point, N. C., made to reimburse the applicant's treasury for capital expenditures. The note will bear interest at the rate of 2 per cent and will be payable 30 days from date of issue, with the privilege of renewal from time to time until paid at an interest rate not exceeding 3½ per cent.

Proceeds from the sale of the second note, in an amount not exceeding \$40,000, will evidence a loan of a like amount which will be applied toward the purchase of three 70-ton Diesel-electric locomotives from the **General Electric Company** at a total cost of \$203,925. The note will be issued when the equipment is ready for delivery, will bear interest at a rate not exceeding 3½ per cent and will be payable 30 days from date of issue, with the privilege of renewal from time to time until paid at an interest rate not exceeding 3½ per cent. The applicant said it intends to borrow the money from whatever bank offers the best terms and interest rate, adding it expects that it can



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CIVILIANS



COAL



CATTLE

. . . Lima builds a locomotive to fit the job!

Lima builds a complete range of modern steam power . . . from the sleek, streamlined passenger locomotive of the type used by the Southern Pacific to haul the "Daylight" . . . to the high-speed, heavy duty articulated mallet used by the Chesapeake and Ohio on heavy coal runs in mountainous territory.

Lima-built power is daily showing what the Modern Steam Locomotive can do to decrease running time and increase availability and revenue.



LIMA, OHIO
Lima Locomotive Division
Lima Shovel and Crane Division

LIMA-HAMILTON CORPORATION

HAMILTON, OHIO
Hooven, Owens, Rentschler Co.
Niles Tool Works Co.

obtain the money at an interest rate of 2 or 2½ per cent, but desires a margin for variation in rates up to 3½ per cent.

ILLINOIS CENTRAL-MISSOURI PACIFIC.—Operating Agreement.—Division 4 of the Interstate Commerce Commission, has authorized the Illinois Central and Missouri Pacific to join in the execution of a supplemental agreement whereby the maximum aggregate of payments in any contract year provided in the contract under which those two roads operate the properties of the Jefferson Southwestern will be increased from \$15,000 to \$25,000, effective January 1, 1946.

Under the provisions of the operating contract, each applicant is required to pay to the Jefferson for use of its tracks \$2.50 for each loaded car handled by them, with the aggregate amount of payments by both applicants limited to \$15,000 in any full contract year. The Jefferson, in turn, is obligated to keep its tracks in safe condition and bear all taxes, assessments and license fees. Under the terms of the supplemental agreement, the unit payment per car would remain unchanged until the aggregate of payments by both the I.C. and M.P. in any contract year reached \$25,000. According to the commission, the annual maximum aggregate payment of \$15,000 has become inadequate, due to increased expenses and taxes.

JACKSONVILLE TERMINAL.—Bonds.—This road has sold, subject to approval by the Interstate Commerce Commission, \$4,000,000 of Series A first mortgage bonds to the First Boston Corporation and associates on a bid of 100.32 for a 3/8 per cent interest rate. Proceeds of the sale will be applied toward the refunding of a like amount of 4½, 5 and 6 per cent bonds, due July 1, 1967, as outlined in *Railway Age* of October 11, page 86.

KANSAS CITY SOUTHERN.—Equipment Trust Certificates.—Division 4 of the Interstate Commerce Commission has authorized this road to assume liability for \$1,760,000 of Series H equipment trust certificates, the proceeds of which will be applied toward the financing of the following equipment purchased from the Electro-Motive Division of the General Motors Corporation: Two Diesel-electric passenger locomotives, consisting of two 1,500-hp. units each, at an estimated total cost of \$587,484, and three Diesel-electric freight locomotives, each consisting of 4 1,500-hp. units, at a total cost of \$1,628,580. The freight locomotives already are in service. The certificates will be dated November 1 and will mature in 20 semi-annual payments of \$88,000 each, from May 1, 1948, to November 1, 1957, inclusive. The report also approves a selling price of 100.5567 with a 2½ per cent interest rate, the bid of Harris Hall & Co. and associates, on which basis the average annual cost will be 2.01 per cent.

LEHIGH VALLEY. — New Director. — Philip T. Sharples, president of the Sharples Corporation, Philadelphia, Pa., and of Sharples Chemicals, Inc., has been elected a director of this road to succeed the late Morris L. Clothier.

LEHIGH & NEW ENGLAND. — Trackage Rights.—This road has applied to the Inter-

state Commerce Commission for approval of amendments to the agreement under which it operates over 18.5 miles of the New York, Susquehanna & Western's line between Hainesburg Junction, N. J., and Swartswood Junction. The amendments increase the charges for use of the track and provide that the L. & N. E. will not, without the consent of the Susquehanna, concur in the establishment of any new route on coal involving movements over the trackage section to railroad deliveries reached by routes involving interchange between the two roads at Hainesburg Junction. The latter would be subject to the qualification that acquiescence of the L. & N. E. in routes ordered by the commission or by the Board of Public Utility Commissioners of New Jersey would not be deemed a concurrence.

NEW YORK, ONTARIO & WESTERN. — Equipment Trust Certificates.—A hearing has been set for November 12 before the United States District Court in New York on a petition of this road's trustee for authority to issue not more than \$2,600,000 of 3 per cent serial equipment trust certificates to be dated December 1, 1947. The certificates would be sold to the Reconstruction Finance Corporation at par plus accrued dividends and proceeds from the sale would be used to finance the purchase of 5 Diesel-electric freight and 21 Diesel-electric switching locomotives, scheduled to be delivered after January 1, 1948.

NEW YORK, NEW HAVEN & HARTFORD.—Equipment Trust Certificates.—This road has applied to the Interstate Commerce Commission for authority to assume liability for \$7,500,000 of equipment trust certificates, the proceeds of which will be applied toward the purchase of 2,500 50-ton steel-sheathed box cars, at a unit price of 3,750, from the Pullman-Standard Car Manufacturing Company. The certificates would be dated November 1 and sold on the basis of competitive bidding.

NEW YORK, CHICAGO & ST. LOUIS.—Equipment Trust Certificates.—Division 4 of the Interstate Commerce Commission has authorized this road to assume liability for \$3,800,000 of 1½ per cent equipment trust certificates, the proceeds of which will be applied toward the purchase of 600 50-ton all-steel box cars, at a unit cost of \$4,220, and 11 2,000-hp. Diesel-electric passenger locomotives, at a unit cost of \$204,099. The box cars will be acquired from the Pullman-Standard Car Manufacturing Company and the locomotives from the American Locomotive Company. The certificates will be dated November 1 and will mature in 10 equal annual installments, starting November 1, 1948. The report also approves a selling price of 99.0599 with a 1½ per cent interest rate, the bid of Halsey, Stuart & Co. and associates, on which basis the average annual cost will be approximately 2.06 per cent.

NEW YORK CENTRAL.—Acquisition.—Examiner R. R. Molster has recommended in a proposed report that Division 4 of the Interstate Commerce Commission authorize the New York Central to acquire, through stock ownership, control of the Niagara Junction, which serves the Niagara Falls, N. Y., industrial area. At the

same time, he has recommended that the intervening roads, the Lehigh Valley and Erie, be included in the transaction through the sale by the N. Y. C. of 25 per cent of Niagara stock to each of those carriers, a proposal which meets with the objection of all three roads concerned.

On November 14, 1946, the N. Y. C. and Niagara Falls Power Company, owner of all 10,000 shares of N. J. stock, reached an agreement whereby the railroad would acquire the stock for \$1,000,000.

The N. Y. C. then offered 20 per cent of the stock to the Erie and a like amount to the L. V., with the understanding that the N. J.'s operation would be controlled by the N. Y. C. and that established routes and channels of trade, including rates and provisions, would not be disturbed. The Erie and L. V., rejected the offer, stating that each desired a one-third interest. The N. Y. C., however, held that the stock should be divided approximately in proportion to the three roads interchange service with the N. J., of which it performs 77 per cent—22 per cent for itself, 22 per cent for the L. V. and 3 per cent for the Canadian National. The remainder of the interchange is with the Erie, which performs it for itself.

As noted above, the recommendation that the N. Y. C. retain 50 per cent of the N. J. stock while selling the remaining 50 per cent in equal parts to the Erie and L. V. meets with the objection of all three roads. The Erie and L. V., the examiner said, pointed out that they compete with each other, as well as with the N. Y. C., for traffic interchanged by the N. J., while the applicant considered the "solution" objectionable because necessary financing or changes in operation might be defeated, and other important decisions affecting welfare of the N. J. might not be made, for want of a clear majority on either hand.

"It would appear that this objection is not unmountable," the examiner said. "Since 1916, the Niagara Junction has had a board of nine directors. If the applicants were to elect four directors, and the Lehigh Valley and Erie together were able to elect four, the three proprietors readily might enter into an agreement for selection of a neutral ninth director so that the balance of power would be exercised with impartiality to any of the carriers and in the best interests of all concerned. The indicated ratios of 50, 25 and 25 per cent in the stock would correspond approximately to the present division of interchange among the three trunk lines, and thus give the three proprietors proportionate interest in the Niagara Junction's earnings."

Asserting that control of the Niagara should be vested so as insure continued neutrality of its operation and service, the examiner said that the "degree of such participation" by the N. Y. C., Erie and L. V. "ought not to turn on the respective shares of the connections in the traffic originating or terminating on the switching line in the past, but should be such as to insure equality of opportunity to all connections to solicit and obtain such business and full exercise of the shippers' right to route free from all interference of any considerations foreign to efficient and economical transportation.

"With division of the Niagara Junction

MORE POWER FROM THE BOILER

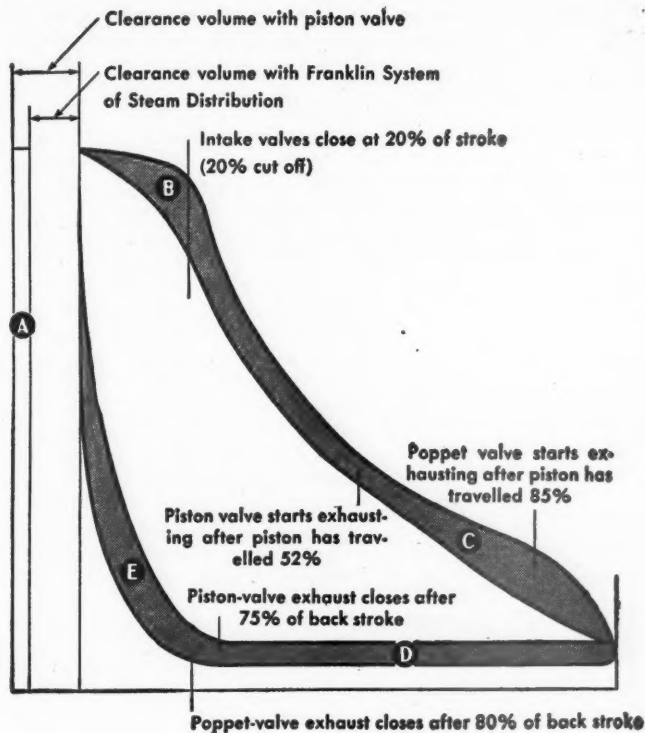
A With reduced clearance volume (space between intake valves and piston at end of stroke) more economical use is made of the steam admitted to cylinders.

B With larger steam flow areas and faster valve openings, steam enters the cylinder with smaller pressure drop. This increases the amount of steam admitted for a given cut-off — increases the power output for a given cut-off, or permits the use of a shorter and more economical cut-off for a given power output.

C With late release, the expansion period is increased substantially. This increases efficiency by increasing the amount of heat transformed into mechanical work.

D With late release and large exhaust areas, the back pressure is lower, which again increases the power obtained from a given amount of steam.

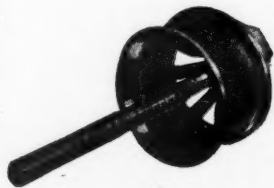
E With low back pressure, and late compression, excessive pressures at the end of the back stroke are avoided. Economical short cut-offs can be used without severe reactions on the running gear.



WITH THE FRANKLIN SYSTEM OF STEAM DISTRIBUTION

These indicator cards represent a locomotive equipped with the Franklin System of Steam Distribution and a locomotive, identical in all other respects, equipped with piston valves. Both cards are based on high-speed operation at 20% cut-off.

As can be seen, the engine equipped with poppet valves can utilize full boiler capacity because of the larger steam flow areas and the faster opening and closing of valves. It develops more horsepower per pound of steam. It uses less fuel and water to deliver a given horsepower output.



FRANKLIN RAILWAY SUPPLY COMPANY, INC.

NEW YORK • CHICAGO • MONTREAL

STEAM DISTRIBUTION SYSTEM • BOOSTER • RADIAL BUFFER • COMPENSATOR AND SNUBBER • POWER REVERSE GEARS
AUTOMATIC FIRE DOORS • DRIVING BOX LUBRICATORS • STEAM GRATE SHAKERS • FLEXIBLE JOINTS • CAR CONNECTION

stock equally among the three connecting carriers, opportunity would exist for the Erie and Lehigh Valley to unite in dominating the management of the switching carrier; and such domination by two of this carrier's connections would be no more desirable, in the public interest, than sole control of domination of the company by the third."

The report also noted that the New York, Chicago & St. Louis, the Wabash and the Canadian National intervened in support of the Erie and L. V.

NORFOLK & WESTERN. — *Dividends on New Common Stock.*—This road has declared an initial quarterly dividend of 75 cents a share and an extra of \$1 a share on its common stock, which recently was split four-for-one. Both payments will be made on December 10 to stockholders of record on November 12. The last quarterly payment on the old stock was \$2.50 a share on September 10, and the last extra was \$3 on March 10.

MISSOURI-KANSAS-TEXAS OF TEXAS. — *New Directors.*—James K. Beach, Dallas, Tex., manager for the Liquid Carbonic Corporation, and William P. Bomar, president of the Bewley Mills, Fort Worth, Tex., were elected to the board of directors of this road, a subsidiary of the Missouri-Kansas-Texas, on November 3.

MISSOURI PACIFIC. — *Equipment Trust Certificates.*—Division 4 of the Interstate Commerce Commission has modified its order of June 5 to authorize this road to substitute 100 70-ton all-steel hopper cars, at an estimated unit cost of \$4,634, in lieu of four sleeping cars among the equipment it plans to purchase through the issue of \$8,700,000 of Series HH equipment trust certificates. As reported in *Railway Age* of June 14, page 1238, the commission has authorized the road to issue the certificates. The hopper cars will be built by the American Car & Foundry Co. The M. P. said that it had been advised by the Budd Company, builder of the sleeping cars, that they would be unable to deliver the equipment before November, 1948.

RICHMOND, FREDERICKSBURG & POTOMAC. — *Promissory Note.*—Division 4 of the Interstate Commerce Commission has authorized this road to issue and sell at par a promissory note not exceeding \$400,000. Proceeds will be applied toward the purchase price of a five-car train, consisting of one 85-ft. low-alloy, high-tensile steel parlor-cafe car, and four 85-ft. low-alloy, high-tensile steel coaches, to be acquired under a conditional sales agreement, from the American Car & Foundry Co. at an estimated cost of \$450,000. The note was sold, subject to commission approval, to the First & Merchants National Bank of Richmond, Va., which offered par at an annual interest rate of 1.6 per cent. The note will be dated November 1 and mature in 20 quarterly installments of \$20,000 each, starting February 1, 1948.

ST. LOUIS-SAN FRANCISCO. — *Reorganization.*—Division 4 of the Interstate Commerce Commission has fixed maximum limits of final allowances for services and expenses of parties in interest and their

counsel during the period, generally, from September 1, 1944, to "end of the proceedings," in connection with the reorganization proceedings of this road under section 77 of the Bankruptcy Act. The commission allowed \$320,171 on claims totaling \$426,784. Among the larger allowances fixed were the following: Hunton, Williams, Anderson, Gay & Moore, and Cravath, Swaine & Moore, counsel for the reorganization managers, \$86,195, on a claim of \$106,195, the latter firm also receiving \$17,611 on a claim of \$17,723 as counsel for the consolidated committee, while the former received nothing on a claim of \$1,128 as special counsel for the same committee, and \$26,872, on a claim of \$28,039, as counsel for the prior lien committee Central Hanover Bank & Trust Company, as depositary for the prior lien committee, \$33,000, on a claim of \$40,472, and \$6,435, on a claim of the same amount, as trustee under the July 1, 1916, prior-lien mortgage of the St. Louis-San Francisco Railway Company; Chase National Bank, as depositary for the consolidated committee, \$26,594, on a claim of the same amount, and \$2,077, on a claim of the same amount, as corporate trustee under the St. Louis-San Francisco Railway Company consolidated mortgage, dated March 1, 1928; W. V. Hodges and Hodges, Reavis, Pantaleoni & Downey, as counsel for the former St. Louis-San Francisco Railway Company, \$25,572, on a claim of \$52,272; and Davis, Polk, Wardwell, Sunderland & Kiendl, as counsel for the Fort Scott committee, \$20,000, on a claim of \$46,500, and \$2,000, on a claim of \$5,000, as special counsel for the reorganization managers.

Dividends Declared

Chestnut Hill.—75¢, quarterly, payable December 4 to holders of record November 20.

Cleveland & Pittsburgh.—4% guaranteed, 50¢, quarterly; 7% guaranteed, 87½¢, quarterly, both payable December 1 to holders of record November 10.

Delaware & Hudson.—\$1.00, quarterly, payable December 20 to holders of record November 28.

Denver & Rio Grande Western.—escrow certificates for preferred (accum.), \$5.00, payable November 25 to holders of record November 10.

Norfolk & Western.—new common, 75¢, initial quarterly, payable December 10 to holders of record November 12; extra, \$1.00, payable December 10 to holders of record November 20.

Reading.—4% non-cum. 1st pfd., 50¢, quarterly, payable December 11 to holders of record November 20.

Southern.—common, 75¢, quarterly; 5% non-cum. pfd., \$1.25, quarterly, both payable December 15 to holders of record November 15.

Texas & Pacific.—\$1.00, payable December 31 to holders of record December 12.

West Jersey & Seashore.—6% special guaranteed, \$1.50, semi-annually, payable December 1 to holders of record November 15.

Average Prices Stocks and Bonds

	Nov. 5	Last week	Last year
Average price of 20 representative railway stocks ..	48.15	48.33	48.88
Average price of 20 representative railway bonds ..	86.69	87.10	90.05

Abandonments

ATCHISON, TOPEKA & SANTA FE.—Division 4 of the Interstate Commerce Commission has authorized this road to abandon a line from Cottonwood Falls, Kan., to a point near Gladstone, approximately 3.2

miles. The commission's report noted that Gladstone is served by another line of the applicant and that Cottonwood Falls is within the switching limits of Strong City, to which locality service will not be affected by the abandonment.

CHICAGO, BURLINGTON & QUINCY.—Division 4 of the Interstate Commerce Commission has modified its February 22, 1944, order in Finance Docket No. 14161 which authorized the abandonment by this road of two lines in Iowa. The modification was to impose the so-called Burlington conditions for the protection of employees, other than those represented by the Brotherhood of Maintenance of Way Employees and the Order of Railroad Telegraphers. Employees represented by the latter two unions have been protected through a previous agreement reached with the carrier.

In June of this year, the Brotherhood of Railroad Trainmen and the Brotherhood of Locomotive Engineers advised the commission that they were unable to reach a satisfactory agreement with the carrier with respect to their members who may have been adversely affected by the abandonment and requested that the proceeding be reopened. In September, they informed the commission that they had reached an agreement providing that the carrier would afford their members the so-called Burlington conditions and later that month withdrew the petitions asking that the commission reopen the proceeding.

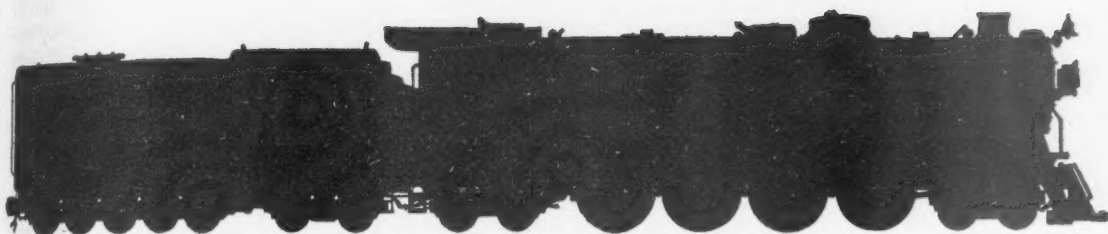
The original order of February 22, 1944, effective one year from that date, had reserved jurisdiction for a two-year period from the effective date to consider the question of employee-protection. The two-year period later was extended to January 1, 1948.

ILLINOIS CENTRAL.—This road has applied to the Interstate Commerce Commission for authority to abandon that portion of its line extending from Grenada, Miss., to Grenada Junction, 31.5 miles.

MINNEAPOLIS, ST. PAUL & SAULT STE. MARIE.—This road and the Wisconsin Central have applied to the Interstate Commerce Commission for authority to abandon, including abandonment of operation by the former, a spur track extending approximately 3.3 miles westerly from a point near Antioch, Ill.

NEW YORK, NEW HAVEN & HARTFORD.—Examiner Lucian Jordan has recommended in a proposed report that Division 4 of the Interstate Commerce Commission authorize this road to abandon a branch line extending from Hawleyville, Conn., to Litchfield, approximately 32.5 miles. The examiner would also have the commission impose the usual employee-protection conditions.

According to the report, all points in the territory involved can be served by motor carriers on improved highways. "It is apparent," the report continued in part, "that the line . . . is being operated at a loss and that an unreasonable amount of money must be spent to rehabilitate the track and structures if operations are to be continued. It is not shown that after rehabilitation, the line can be operated except at a loss."



improved water circulation

increases steaming efficiency



The installation of Security Circulators in existing steam locomotives results in a circulation of water from the side water-legs, through the Circulators, over the top of the crown sheet.

Besides this, the Security Circulators, located right in the path of the hot gases, provide a very effective additional heating area for speeding evaporation.

Thus in two ways Security Circulators aid in greatly improving the steaming efficiency of a locomotive.

AMERICAN ARCH COMPANY, INC.

NEW YORK • CHICAGO

SECURITY CIRCULATOR DIVISION

STATEN ISLAND RAPID TRANSIT.—This road has applied to the Interstate Commerce Commission for authority to abandon its 0.7-mile ferry line between Perth Amboy, N. J., and Tottenville, N. Y. The applicant, which is controlled by the Baltimore & Ohio, said that "substantial deficits" are being incurred through operation of the ferry service.

ST. LOUIS, BROWNSVILLE & MEXICO.—Examiner Ralph H. Jewell has recommended in a proposed report that Division 4 of the Interstate Commerce Commission issue a certificate stipulating that public convenience and necessity permit abandonment by this road of operation over approximately 16 miles of the Texas Mexican's main line between Robstown, Tex., and Corpus Christi, including terminal facilities at those two points. The application for the certificate was filed by the T. M. after it had sought unsuccessfully to oust the Brownsville by serving notice of termination of the operating agreement and bringing suit out of which came a Supreme Court ruling that the commission had original jurisdiction. The abandonment would be effected by termination of the operating contract, and in that connection the proposed report recommends a commission finding that such termination would be consistent with requirements for reorganization of the Brownsville under section 77 of the Bankruptcy Act. Although its reorganization proceedings is a separate one, the Brownsville is part of the Missouri Pacific system, and its trustee, G. A. Thompson, is also trustee of the M. P.

The trackage agreement provides that either party may cancel it on one year's notice without giving any reason. In October, 1940, the T. M. notified the Brownsville trustee that it was exercising this right, effective 12 months after November 1, 1940. The Brownsville has nevertheless continued to use the facilities covered by the agreement, proffering payments on the basis of the contract rates, which have been refused by the T. M. Meanwhile, the latter filed its suit in the Texas courts, asking that the Brownsville be enjoined from further use of the facilities and seeking damages for such after the date of the contract-cancellation notice. As indicated above, the case reached the United States Supreme Court which held that the controversy should be submitted to the commission for determination of the administrative questions involved under the Interstate Commerce Act and section 77 of the Bankruptcy Act (see *Railway Age* of May 4, 1946, page 928).

The Brownsville, according to the examiner's report, takes the position that the trackage contract should not be cancelled since there is no assurance that its line may not be separated from the M. P. system before the M. P. reorganization proceeding is concluded and that, as an independent carrier, it would have no access to Corpus Christi. Noting that no party in the present proceedings offered any evidence or suggestion that such separation is contemplated or that any reason exists for a separation in the future, the examiner said that M. P. plan of reorganization approved by the commission in 1940 as well as the

modified plan approved in 1944—the plan which has been remanded to the commission—provides for a unification of all the present lines of the M. P. system including the Brownsville and the San Antonio, Uvalde & Gulf, which now provides the Brownsville with another route into Corpus Christi.

In leading up to his recommendation that the abandonment certificate be issued, the examiner referred to evidence of record which indicated that it has been the Brownsville's policy, since it became part of the M. P. system, to route the bulk of its Corpus Christi business over this alternate route via the Uvalde's line, and generally to promote the development of that route in preference to that covered by the agreement with the T. M. In view of that situation, the report recommended a commission finding that present use by the Brownsville of the T. M. trackage "is unimportant and is likely to remain so as long as the Brownsville and Uvalde remain parts of the Missouri Pacific system."

Examiner Jewell also recommended that the commission find it unnecessary to impose conditions for the protection of employees who may be adversely affected by the abandonment.

Construction

CANADIAN NATIONAL.—This road has awarded the following contracts for construction in its Western region, the estimated costs of which are shown in parentheses: To the W. C. Wells Construction Company of Wilkie, Sask., for a station at Carrot River, Sask. (\$24,728), and for a car department building at Calder yard in Edmonton, Alta. (\$42,175); to Lockerbie & Hole of Vancouver, B. C., for the installation of a heating plant in the road's steamship pier (\$24,385); and to the Beaver Construction Company of Winnipeg, Man., for a power house in the East yards at Winnipeg (\$28,669).

CHICAGO & EASTERN ILLINOIS.—This road has awarded a contract to the P. & H. Construction Co. of Evansville, Ind., for the construction of a two-story dormitory building, at Evansville, to be used by dining car crews. The cost of this structure will be \$22,824. The Chicago Heights Terminal Transfer (owned by the C. & E. I.) has awarded a contract to G. A. Johnson & Son of Chicago, for the construction of a Diesel switch-engine service house and an annex, at Chicago Heights, Ill. Exclusive of heating and lighting, the building will cost \$28,420. The road's own forces will rearrange tracks leading to the new building and erect fuel oil and sanding facilities. The entire project, including the building, will cost an estimated \$55,000.

PARKWAY INDUSTRIAL.—The Interstate Commerce Commission has permitted the Pennsylvania, Louisville & Nashville, New York Central, Cincinnati, New Orleans & Texas Pacific, Norfolk & Western and Chesapeake & Ohio to intervene in the proceeding wherein this road seeks authority to construct a 4.5-mile line in Cincinnati, O.

Railway Officers

EXECUTIVE

W. M. Long, eastern traffic manager of the Illinois Terminal, with headquarters at New York, has been appointed assistant vice-president at St. Louis, Mo. Mr. Long is succeeded by **K. L. Stivers**, northern traffic manager at Chicago, who is succeeded by **D. A. Lewis**.

The position of assistant vice-president, operation and maintenance of the Reading has been abolished.

J. D. Walker, general manager of the Colorado & Southern, at Denver, Colo., has been appointed also assistant vice-president.

FINANCIAL, LEGAL AND ACCOUNTING

Henry O. Harries, whose promotion to tax agent of the Atchison, Topeka & Santa Fe, with headquarters at Los Angeles, Cal., was reported in *Railway Age* of November 1, was born on December 26, 1897, at Kansas City, Mo., and became associated



Henry O. Harries

with the Santa Fe in 1915 as a stenographer-clerk in the operating department at San Bernardino, Cal. He transferred to the tax department in 1924, and in 1927 was promoted to tax investigator. Mr. Harries had served since 1929 as assistant tax agent, the position he held at the time of his recent promotion.

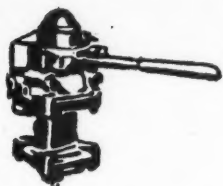
Alfred W. Hesse, Jr., and **Lockwood W. Fogg, Jr.**, have been appointed assistant general solicitors of the Reading, with headquarters at Philadelphia, Pa.

OPERATING

Bernard Allen, general superintendent of the Canadian National's British Columbia district, with headquarters at Vancouver, B. C., has been appointed manager at that point. He is succeeded by **John P. Cooper**, division superintendent at Port

Slipping Drivers increase Operating Expense

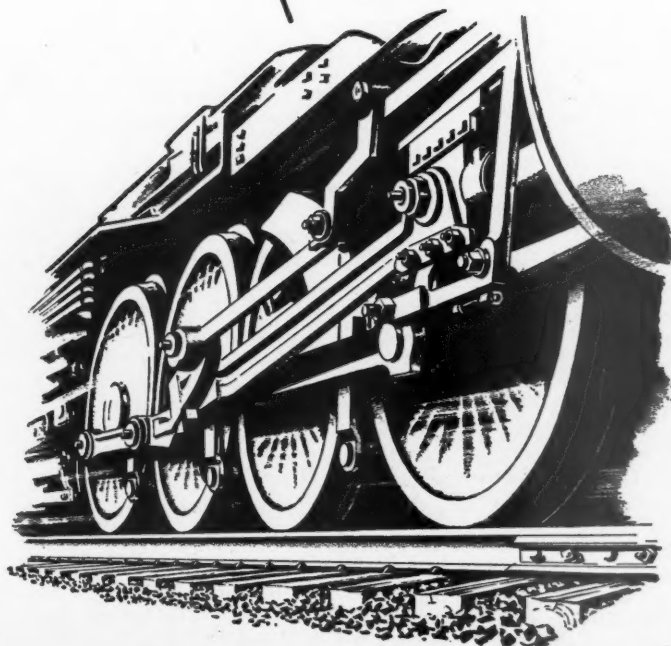
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Arthur, Ont. A photo of Mr. Allen and a sketch of his career appeared in *Railway Age* of April 5 of this year, in connection with his promotion to general superintendent.

R. E. Sizer, trainmaster of the Chicago, Milwaukee, St. Paul & Pacific at Mason City, Iowa, has been appointed assistant superintendent at that point. Mr. Sizer's former position has been abolished.

Edward Marksheffel, general superintendent of the Union Pacific's South-Central district, with headquarters at Salt Lake City, Utah, has retired after 49 years of service with the railroad.

D. M. Rankin, division superintendent of the Atchison, Topeka & Santa Fe at Las Vegas, N. M., has been transferred to Chanute, Kan., succeeding **L. W. Powell**.

J. R. Mann, superintendent of transportation of the Detroit & Toledo Shore Line at Detroit, Mich., has retired after more than 47 years of service with the railroad.

A. O. Lagerstrom, architect of the Chicago, Milwaukee, St. Paul & Pacific, has been appointed assistant superintendent of buildings, with headquarters at Chicago. He is succeeded by **K. E. Hornung**, chief architectural draftsman for the road.

W. S. Sloatman, assistant superintendent of the Reading division of the Reading at Reading, Pa., has been promoted to superintendent of the Shamokin division at Tamaqua, Pa., succeeding **R. C. Thran**, who has been transferred to the Reading division, succeeding **L. R. Mumper**, appointed chief of personnel. **J. F. Gruber** has been appointed assistant superintendent of the Philadelphia division at Philadelphia, Pa., succeeding **A. R. Nice, Jr.**, who has been transferred to the Reading division at Reading, to succeed Mr. Sloatman.

A. J. Farnham, assistant superintendent of the Milwaukee (Wis.) terminals, of the Chicago, Milwaukee, St. Paul & Pacific, has been appointed assistant superintendent of the road's Milwaukee division, with headquarters in that city. Mr. Farnham is succeeded by **K. R. Schwartz**. **John Drombrowski** also has been appointed assistant superintendent of the Milwaukee terminals. **W. T. Stewart**, trainmaster at Marion, Iowa, has been transferred to Milwaukee, and is succeeded at Marion by **G. W. Riley**. **J. D. Simon** has been appointed trainmaster at Green Bay, Wis., succeeding **F. H. Ryan**, who, at his own request, has returned to his former position as train dispatcher.

J. W. Terrill has been appointed trainmaster of the Chicago, Burlington & Quincy, with headquarters at St. Joseph, Mo., succeeding **G. L. Griggs**, whose promotion to assistant superintendent at Centerville, Iowa, was reported in *Railway Age* of November 1.

L. A. Anderson has been appointed trainmaster of the Tampa district of the Atlantic Coast Line, with headquarters at

Lakeland, Fla. **W. W. Huckleba** has been appointed trainmaster of the Waycross district at Waycross, Ga. **E. H. Cook** has been appointed trainmaster of the Montgomery district at Dothan, Ala.

Carroll C. Mullen has been appointed trainmaster of the Southern at Birmingham, Ala.

George E. Rollins, whose appointment as general superintendent of the Western division of the Atlantic Coast Line at Atlanta, Ga., was reported in *Railway Age* of October 25, was born at Sumter, S. C., on September 10, 1887. Mr. Rollins entered railroad service on September 23, 1908, as brakeman on the Atlantic Coast Line, subsequently serving as yard clerk at South Rocky Mount, N. C., brakeman, conductor, night yardmaster at South Rocky Mount, general yardmaster at Sumter and Colum-



George E. Rollins

bia, S. C., terminal trainmaster at Florence, S. C., and trainmaster of the Norfolk district. He was appointed assistant superintendent of the Tampa district in 1925 and was promoted to superintendent of the Lakeland district at Dunnellon, Fla., in November, 1927, transferring to the Jacksonville district at Sanford, Fla., in March, 1936. Mr. Rollins was appointed superintendent transportation of the Northern division at Savannah, Ga., in July, 1943, which position he held until last July 28, when he became acting general superintendent of the Western division at Atlanta.

William R. Eble, whose promotion to general superintendent of the Chicago, Burlington & Quincy's Central district, at Burlington, Iowa, was reported in *Railway Age* of November 1, was born at Galesburg, Ill., and entered service there with the Burlington in 1909 as a stenographer. He subsequently transferred to train service, becoming a conductor in 1920 and trainmaster at Hannibal, Mo., in 1926. He was promoted to assistant superintendent at Brookfield, Mo., in 1930, and, prior to his recent promotion, has been superintendent at Galesburg since 1936.

G. B. Hoover, superintendent of transportation of the Colorado & Southern, has been appointed superintendent of the road's Northern and Southern divisions, with headquarters as before at Denver, Colo. Mr. Hoover's former position has been

abolished and its functions have been assumed by the assistant vice-president and general manager. In his new position, Mr. Hoover succeeds **W. P. Wilson**, whose transfer to McCook, Neb., was reported in *Railway Age* of November 1.

E. A. Hamerski, assistant superintendent of the Minneapolis, St. Paul & Sanit Ste. Marie at Stevens Point, Wis., has been promoted to division superintendent at Thief River Falls, Minn., succeeding the late **P. Bryant**. Mr. Hamerski is succeeded by **J. F. Wegner**, trainmaster at Fond du Lac, Wis. **W. A. Taft** and **W. O. Solberg** have been appointed trainmasters respectively at Stevens Point and Enderlin, N. D.

J. Clyde Mixon, whose appointment as superintendent transportation of the Northern division of the Atlantic Coast Line at Savannah, Ga., was reported in *Railway Age* of October 25, was born at Waterloo, S. C., on May 29, 1898. Mr. Mixon is a graduate of Dobeys private school, Augusta, Ga., and of Richmond Academy and Junior College, Augusta. He also attended Columbia University, New York. Entering railroad service as a clerk in the office of the vice-president and general manager of the Charleston & Western Carolina on May 26, 1916, Mr. Mixon later served as secretary to the general superintendent and as assistant chief clerk in that office. He was then appointed roadway accountant of the Georgia, later becoming chief clerk to the



J. Clyde Mixon

general superintendent of the Charleston & Western Carolina. Mr. Mixon went with the Atlantic Coast Line as chief clerk to the general superintendent at Savannah, Ga., on December 1, 1923. On November 1, 1939, he was promoted to terminal trainmaster at Charleston, S. C., and on February 1, 1943, he became trainmaster of the Columbia district at Florence, S. C. He was appointed acting superintendent transportation of the Northern division, last July 28, which position he held until his appointment as superintendent transportation, effective October 14.

Samuel L. Fee, whose promotion to general manager, Lines West, of the Chicago, Burlington & Quincy, with headquarters at Omaha, Neb., was reported in *Railway Age* of November 1, was born on

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WILMERDING, PA.

October 9, 1889, at Knoxville, Iowa. He joined the Burlington in 1906, and served successively until 1917 as telegraph operator, brakeman, fireman, clerk in the industrial department and clerk in the passenger traffic department. In 1917, Mr. Fee was appointed general agent for troop movement under the U. S. Railroad Adminis-



Samuel L. Fee

tration, with headquarters at Rockford, Ill. He was appointed trainmaster on the Burlington in 1919, and later that year became superintendent of terminals at St. Louis, Mo. In 1920, he was again appointed trainmaster, and during 1926 and 1927 served on the staff of the road's general manager. He was promoted to division superintendent at Centerville, Iowa, in 1927, and held this position later at Alliance, Neb., La-Crosse, Wis., Lincoln, Neb., and Aurora, Ill. He was further advanced to general superintendent at Lincoln in 1936, and in 1939 was transferred to Galesburg, Ill. Mr. Fee was located at the latter point at the time of his recent appointment.

TRAFFIC

The Delaware & Hudson has announced the opening of a freight traffic office at San Francisco, Cal., with **G. C. Seaman** as general agent, freight department.

T. C. Richardson has been appointed district freight agent of the Lehigh Valley, with headquarters at Chicago, succeeding to the duties of **G. B. Peterson**, assistant general freight agent, who has retired after 34 years of service with the railroad.

E. A. Martin has been appointed general agent of the Chicago, Burlington & Quincy at Sioux City, Iowa, where the road has established a separate office to replace the office heretofore maintained jointly with the Great Northern. **R. W. Blaisdell** has been appointed foreign freight agent at San Francisco, Cal., and **J. P. McDermott**, commercial agent at Davenport, Iowa, has been advanced to general agent at Cheyenne, Wyo.

C. Gard Oliveros, assistant general passenger agent of the Florida East Coast, with headquarters at St. Augustine, Fla., has been promoted to general passenger agent.

R. C. Casey has been appointed general agent of the Atlantic Coast Line at

Miami, Fla. **J. G. Lawrence** has been appointed general agent at St. Petersburg, Fla.

J. M. Fowler and **E. F. Bliss** have been appointed general agents of the Illinois Terminal, with headquarters at Chicago and Pittsburgh, Pa., respectively.

M. Mason Barber, assistant general freight agent of the Southern, with headquarters at Chattanooga, Tenn., has been promoted to general freight agent, with the same headquarters, succeeding **Charles L. Dautrich**, who has been assigned other duties.

D. W. Clark has been appointed general agent of the Chesapeake & Ohio at Seattle, Wash., succeeding **R. H. Webb**, who has resigned.

ENGINEERING & SIGNALING

John H. Christie, whose retirement as architect of the Southern Pacific, with headquarters at San Francisco, Cal., was reported in *Railway Age* of October 11, was born on April 1, 1878, in Germany, and began his career with the Pittsburg, Shawmut & Northern in 1902. Two years later he joined the S. P. as a draftsman in the engineering department at San Francisco, and in 1909 was appointed head draftsman. He had served as architect of the railroad since 1912.

Lionel E. Peyser, whose promotion to architect of the Southern Pacific, at San Francisco, Cal., was reported in *Railway Age* of October 11, was born on October 15, 1885, at Stockton, Cal., and entered railway



Lionel E. Peyser

service on June 10, 1917, as an architectural draftsman in the general offices of the Southern Pacific at San Francisco. On February 16, 1923, he was appointed architectural designer, and on June 1 of the same year he became leading designer. On July 1, 1927, Mr. Peyser was promoted to assistant architect, and on March 16, 1943, he became principal assistant architect, which position he held until his recent promotion to architect.

James K. Gloster, assistant division engineer of the Louisville & Nashville, with headquarters at Louisville, Ky., has been appointed assistant engineer, chief engineer's office, at Louisville. He suc-

ceeds **Robert Samuel**, who has resigned. Mr. Gloster is succeeded by **R. B. Lindsey**, resident engineer at Pascagoula, Miss., who in turn is succeeded by **Claude Johnston**. **Alex Manson**, assistant engineer on the Louisville and Birmingham divisions, has been appointed assistant engineer in the miscellaneous department of the chief engineer's office. **A. E. Hotard**, draftsman in the chief engineer's office, has been advanced to assistant engineer of the Birmingham division.

G. L. Field, division engineer of the Capreol division of the Canadian National at Capreol, Ont., has been transferred to the St. Lawrence division with headquarters at Montreal, Que., succeeding **D. M. Trotter**, promoted.

B. J. Worley, assistant division engineer of the Chicago, Milwaukee, St. Paul & Pacific, with headquarters at Butte, Mont., has been promoted to division engineer at Aberdeen, S. D. Mr. Worley succeeds **K. L. Clark**, who has been transferred to Chicago, succeeding **T. H. Strate**, who has retired.

John M. Bates has been appointed fire and sanitation engineer of the Union Pacific, at Omaha, Neb., succeeding **Edward M. Strauss**, who has retired because of ill health.

MECHANICAL

H. L. Harrell has been appointed master mechanic of the Illinois Central at Clinton, Ill., succeeding **F. P. Nash**, who has retired after more than 40 years of service with the road.

T. J. Lyon, assistant to general superintendent motive power of the New York Central system at New York, has been appointed superintendent of equipment, with jurisdiction over the territory Buffalo and east, and the Boston & Albany, with headquarters at New York, succeeding **A. D. Bingman**, who has been appointed assistant to general superintendent of motive power and rolling stock at New York. **I. W. Martin**, superintendent of (locomotive) shop at West Albany, N. Y., has been appointed assistant to general superintendent of motive power at New York. **W. M. Nagle**, superintendent of shop at Collinwood, Ohio, succeeds Mr. Martin at West Albany and is succeeded at Collinwood by **S. D. Foster**, assistant superintendent of equipment at Chicago. **F. Kossuth**, assistant general foreman at Beech Grove, Ind., has been appointed superintendent of (car) shop at East Buffalo, N. Y. **S. T. Kuhn**, assistant superintendent of equipment at Indianapolis, Ind., has been appointed superintendent of equipment of the Indiana Harbor Belt and the Chicago River & Indiana and assistant superintendent of equipment of the New York Central lines west, with headquarters at Chicago. **C. F. Burns** and **O. M. Houser**, master mechanics at Springfield, Mass., and Indianapolis, respectively, have been appointed assistant superintendents of equipment at Cleveland, Ohio, and Indianapolis, respectively. **W. C. Wardwell**, master mechanic at Albany, N. Y., and **C. N. Kittle**, superintendent of shop at East Buffalo, have been appointed assistant su-

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perintendents of equipment at New York. Mr. Kittle succeeds **W. N. Messimer**, who has been promoted to superintendent of equipment of the subsidiary Merchants Despatch Transportation Corporation at Chicago. **W. H. Chidley**, assistant master mechanic at East Syracuse, N. Y., has been promoted to master mechanic, with headquarters at Springfield, Mass., having jurisdiction over the Boston & Albany. **F. J. Fahey**, assistant superintendent of equipment at New York, has been appointed master mechanic, at Albany.

Walter W. Matzke has been appointed assistant to the vice-president—mechanical, of the Chicago & North Western, at Chicago, succeeding **Thomas F. Powers**, whose retirement was reported in *Railway Age* of October 25.

PURCHASES AND STORES

James Ferebee Brown, whose appointment as general storekeeper of the Virginian at Princeton, W. Va., was reported in *Railway Age* of October 4, was born on June 12, 1900, and entered the service of the Virginian on December 4, 1918, as clerk in the purchasing department at Norfolk, Va. Mr. Brown was appointed



James Ferebee Brown

assistant chief clerk in the general storekeeper's office at Princeton on May 20, 1923, becoming chief clerk to general storekeeper there on April 4, 1924. He was appointed chief clerk to purchasing agent at Norfolk on April 30, 1929, and became assistant to purchasing agent at Norfolk on August 1, 1942, which position he held until his recent appointment.

S. D. Sneddon, general storekeeper of the Central region of the Canadian National at Toronto, Ont., has been appointed manager of stores at Montreal, Que., succeeding **Lorne Cameron Thomson**, who has retired. Mr. Thomson was born on November 25, 1882, at Kingston, Ont., and began his railway career a half century ago in the stores department of the Canadian Pacific, becoming storekeeper, Ontario lines, Canadian Northern (now C. N. R.) in 1907. Five years later he was appointed general storekeeper, eastern lines at Toronto, Ont. He served on the Grand Trunk Arbitration Committee following his return from government service in 1919, and in 1920 became chief of stores

of the Canadian National at Montreal. Mr. Thomson was appointed manager of stores for the system in 1924. In May, 1940, he was loaned to the staff of the minister of national defence at Ottawa and later that year to the Naval department for the purpose of accelerating supplies in that department. Mr. Thomson became manager of stores, naval service, in 1941, and successively director-general of naval stores and deputy chief, Naval Equipment and Supply in 1943. He resumed his duties with the C. N. R. in December, 1945.

A. Grayum Baker has been appointed purchasing agent of the St. Louis Southwestern, with headquarters at St. Louis, Mo.

SPECIAL

Andrew M. Bimson, superintendent of property protection and employment of the Delaware, Lackawanna & Western, with headquarters at Hoboken, N. J., has been promoted to assistant general manager, in charge of personnel. **Edward W. Thomas**, chief of police, succeeds Mr. Bimson as superintendent of property protection. The position of chief of police has been abolished. Mr. Bimson is a native of Paterson, N. J. He started railroad work in January, 1916, as a clerk with the New York, Susquehanna & Western, then part of the Erie. He became secretary to the assistant to president in November, 1918, subsequently enlisting in the Navy. In July, 1919, Mr. Bimson resumed his position with the Erie, being promoted to superintendent of the employment bureau in June, 1922, and in February, 1939, he was placed in charge of personal records. Mr. Bimson resigned from the Erie in May, 1944, to enter the service of the Lackawanna.

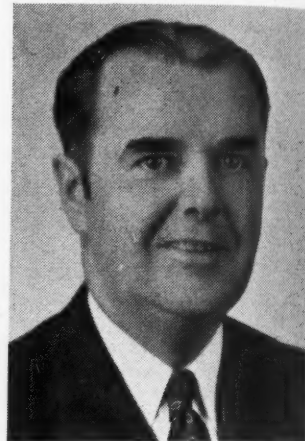
Ernest W. Hull, whose appointment as general manager of public relations and sales of the Railway Express Agency at New York, was reported in *Railway Age* of October 18, was born at Cleveland, Ohio, and has represented the Agency as travel-



Ernest W. Hull

ing commercial agent, traffic agent and district sales manager in the mid-central states. He became assistant to general manager of public relations at New York in 1942 and was serving as acting general manager of public relations at the time of his recent appointment as general manager of public relations and sales.

Howard W. McCauley, whose appointment as chief of personnel of the Northern Pacific, was reported in *Railway Age* of November 1, was born at St. Paul, Minn., on June 29, 1897, and attended St. Thomas college and the University of Minnesota. He entered railroad service with the N. P. in 1913, as a clerk in the office of car accountant at St. Paul, serving at that point during summer vacation periods until 1916. He then joined the U. S. Corps of Engineers as a rodman, and in December, 1917, became a timekeeper in



Howard W. McCauley

the engineering department of the Chicago, St. Paul, Minneapolis & Omaha. Mr. McCauley next joined the Great Northern, holding positions successively as a clerk in the engineering department at Superior, Wis., and accountant in the valuation department at St. Paul. Following his association with the N. P. in 1923, he served in various capacities, including that of rodman in the engineering department, bridge inspector, roadmaster, division roadmaster, trainmaster-roadmaster and trainmaster. He became superintendent of ore operations at Superior in April, 1942, and in November of that year was appointed division superintendent at Glendive, Mont., which position he held at the time of his new appointment.

OBITUARY

D. R. Hickok, who retired last July as manager of mail, baggage and express of the Chicago & North Western, died on October 29, in the Presbyterian hospital at Chicago.

Thomas Edward Huffman, merchandise traffic manager of the Texas & Pacific, with headquarters at Dallas, Tex., died on October 25. Mr. Huffman was born at Longview, Tex., and began his career there with the T. & P. in 1902 as baggage master and railway express clerk. He subsequently served in various capacities, including that of agent, general agent and merchandise traffic agent prior to his promotion to merchandise traffic manager. Mr. Huffman also organized and developed the T. & P.'s rail-motor transport system.

P. Bryant, division superintendent of the Minneapolis, St. Paul & Sault Ste. Marie at Thief River Falls, Minn., who was granted a leave of absence last September, died recently.